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Goddard, Audrey
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Grimaldi, Christopher J.
Gurney, Austin L.
Watanabe, Colin K.
Wood, William I.

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 aaccttaatt tattattaac atacctaaga agtacattgt tacctctata 2250
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<210> 6

<211> 322

<212> PRT

<213> Homo Sapien

<400> 6

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Thr	Thr	Arg	Leu	Leu	Val	Gln	Gly	Ser	Leu	Arg	Ala	Glu	Glu	Leu
			20					25						30
Ser	Ile	Gln	Val	Ser	Cys	Arg	Ile	Met	Gly	Ile	Thr	Leu	Val	Ser
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Lys	Lys	Ala	Asn	Gln	Gln	Leu	Asn	Phe	Thr	Glu	Ala	Lys	Glu	Ala
			50					55						60
Cys	Arg	Leu	Leu	Gly	Leu	Ser	Leu	Ala	Gly	Lys	Asp	Gln	Val	Glu
			65					70						75
Thr	Ala	Leu	Lys	Ala	Ser	Phe	Glu	Thr	Cys	Ser	Tyr	Gly	Trp	Val
			80					85						90
Gly	Asp	Gly	Phe	Val	Val	Ile	Ser	Arg	Ile	Ser	Pro	Asn	Pro	Lys
			95					100						105
Cys	Gly	Lys	Asn	Gly	Val	Gly	Val	Leu	Ile	Trp	Lys	Val	Pro	Val
			110					115						120
Ser	Arg	Gln	Phe	Ala	Ala	Tyr	Cys	Tyr	Asn	Ser	Ser	Asp	Thr	Trp
			125					130						135

Thr	Asn	Ser	Cys	Ile	Pro	Glu	Ile	Ile	Thr	Thr	Lys	Asp	Pro	Ile	
				140					145					150	
Phe	Asn	Thr	Gln	Thr	Ala	Thr	Gln	Thr	Thr	Glu	Phe	Ile	Val	Ser	
				155					160					165	
Asp	Ser	Thr	Tyr	Ser	Val	Ala	Ser	Pro	Tyr	Ser	Thr	Ile	Pro	Ala	
				170					175					180	
Pro	Thr	Thr	Thr	Pro	Pro	Ala	Pro	Ala	Ser	Thr	Ser	Ile	Pro	Arg	
				185					190					195	
Arg	Lys	Lys	Leu	Ile	Cys	Val	Thr	Glu	Val	Phe	Met	Glu	Thr	Ser	
				200					205					210	
Thr	Met	Ser	Thr	Glu	Thr	Glu	Pro	Phe	Val	Glu	Asn	Lys	Ala	Ala	
				215					220					225	
Phe	Lys	Asn	Glu	Ala	Ala	Gly	Phe	Gly	Gly	Val	Pro	Thr	Ala	Leu	
				230					235					240	
Leu	Val	Leu	Ala	Leu	Leu	Phe	Phe	Gly	Ala	Ala	Ala	Gly	Leu	Gly	
				245					250					255	
Phe	Cys	Tyr	Val	Lys	Arg	Tyr	Val	Lys	Ala	Phe	Pro	Phe	Thr	Asn	
				260					265					270	
Lys	Asn	Gln	Gln	Lys	Glu	Met	Ile	Glu	Thr	Lys	Val	Val	Lys	Glu	
				275					280					285	
Glu	Lys	Ala	Asn	Asp	Ser	Asn	Pro	Asn	Glu	Glu	Ser	Lys	Lys	Thr	
				290					295					300	
Asp	Lys	Asn	Pro	Glu	Glu	Ser	Lys	Ser	Pro	Ser	Lys	Thr	Thr	Val	
				305					310					315	
Arg	Cys	Leu	Glu	Ala	Glu	Val									
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<210> 7

<211> 2586

<212> DNA

<213> Homo Sapien

<400> 7

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<211> 350

<212> PRT

<213> Homo Sapien

<400> 8

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				20					25				30	
Pro	Val	Lys	Pro	Gly	Pro	Ala	Leu	Ser	Tyr	Pro	Gln	Glu	Glu	Ala
				35					40				45	
Thr	Leu	Asn	Glu	Met	Phe	Arg	Glu	Val	Glu	Glu	Leu	Met	Glu	Asp
				50					55				60	
Thr	Gln	His	Lys	Leu	Arg	Ser	Ala	Val	Glu	Glu	Met	Glu	Ala	Glu
				65					70				75	
Glu	Ala	Ala	Ala	Lys	Ala	Ser	Ser	Glu	Val	Asn	Leu	Ala	Asn	Leu

80					85					90				
Pro	Pro	Ser	Tyr	His	Asn	Glu	Thr	Asn	Thr	Asp	Thr	Lys	Val	Gly
				95					100					105
Asn	Asn	Thr	Ile	His	Val	His	Arg	Glu	Ile	His	Lys	Ile	Thr	Asn
				110					115					120
Asn	Gln	Thr	Gly	Gln	Met	Val	Phe	Ser	Glu	Thr	Val	Ile	Thr	Ser
				125					130					135
Val	Gly	Asp	Glu	Glu	Gly	Arg	Arg	Ser	His	Glu	Cys	Ile	Ile	Asp
				140					145					150
Glu	Asp	Cys	Gly	Pro	Ser	Met	Tyr	Cys	Gln	Phe	Ala	Ser	Phe	Gln
				155					160					165
Tyr	Thr	Cys	Gln	Pro	Cys	Arg	Gly	Gln	Arg	Met	Leu	Cys	Thr	Arg
				170					175					180
Asp	Ser	Glu	Cys	Cys	Gly	Asp	Gln	Leu	Cys	Val	Trp	Gly	His	Cys
				185					190					195
Thr	Lys	Met	Ala	Thr	Arg	Gly	Ser	Asn	Gly	Thr	Ile	Cys	Asp	Asn
				200					205					210
Gln	Arg	Asp	Cys	Gln	Pro	Gly	Leu	Cys	Cys	Ala	Phe	Gln	Arg	Gly
				215					220					225
Leu	Leu	Phe	Pro	Val	Cys	Thr	Pro	Leu	Pro	Val	Glu	Gly	Glu	Leu
				230					235					240
Cys	His	Asp	Pro	Ala	Ser	Arg	Leu	Leu	Asp	Leu	Ile	Thr	Trp	Glu
				245					250					255
Leu	Glu	Pro	Asp	Gly	Ala	Leu	Asp	Arg	Cys	Pro	Cys	Ala	Ser	Gly
				260					265					270
Leu	Leu	Cys	Gln	Pro	His	Ser	His	Ser	Leu	Val	Tyr	Val	Cys	Lys
				275					280					285
Pro	Thr	Phe	Val	Gly	Ser	Arg	Asp	Gln	Asp	Gly	Glu	Ile	Leu	Leu
				290					295					300
Pro	Arg	Glu	Val	Pro	Asp	Glu	Tyr	Glu	Val	Gly	Ser	Phe	Met	Glu
				305					310					315
Glu	Val	Arg	Gln	Glu	Leu	Glu	Asp	Leu	Glu	Arg	Ser	Leu	Thr	Glu
				320					325					330
Glu	Met	Ala	Leu	Gly	Glu	Pro	Ala	Ala	Ala	Ala	Ala	Ala	Leu	Leu
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Gly	Gly	Glu	Glu	Ile										
				350										

<210> 9

<211> 1395
<212> DNA
<213> Homo Sapien

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<210> 10
<211> 321
<212> PRT
<213> Homo Sapien

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Pro Gly Leu Met Cys Val Phe Gln Gly Tyr Ser Ser Lys Gly Leu
35 40 45
Ile Gln Arg Ser Val Phe Asn Leu Gln Ile Tyr Gly Val Leu Gly
50 55 60
Leu Phe Trp Thr Leu Asn Trp Val Leu Ala Leu Gly Gln Cys Val
65 70 75
Leu Ala Gly Ala Phe Ala Ser Phe Tyr Trp Ala Phe His Lys Pro
80 85 90
Gln Asp Ile Pro Thr Phe Pro Leu Ile Ser Ala Phe Ile Arg Thr
95 100 105
Leu Arg Tyr His Thr Gly Ser Leu Ala Phe Gly Ala Leu Ile Leu
110 115 120
Thr Leu Val Gln Ile Ala Arg Val Ile Leu Glu Tyr Ile Asp His
125 130 135
Lys Leu Arg Gly Val Gln Asn Pro Val Ala Arg Cys Ile Met Cys
140 145 150
Cys Phe Lys Cys Cys Leu Trp Cys Leu Glu Lys Phe Ile Lys Phe
155 160 165
Leu Asn Arg Asn Ala Tyr Ile Met Ile Ala Ile Tyr Gly Lys Asn
170 175 180
Phe Cys Val Ser Ala Lys Asn Ala Phe Met Leu Leu Met Arg Asn
185 190 195
Ile Val Arg Val Val Val Leu Asp Lys Val Thr Asp Leu Leu Leu
200 205 210
Phe Phe Gly Lys Leu Leu Val Val Gly Gly Val Gly Val Leu Ser
215 220 225
Phe Phe Phe Phe Ser Gly Arg Ile Pro Gly Leu Gly Lys Asp Phe
230 235 240

Lys	Ser	Pro	His	Leu	Asn	Tyr	Tyr	Trp	Leu	Pro	Ile	Met	Thr	Ser
				245					250					255
Ile	Leu	Gly	Ala	Tyr	Val	Ile	Ala	Ser	Gly	Phe	Phe	Ser	Val	Phe
				260					265					270
Gly	Met	Cys	Val	Asp	Thr	Leu	Phe	Leu	Cys	Phe	Leu	Glu	Asp	Leu
				275					280					285
Glu	Arg	Asn	Asn	Gly	Ser	Leu	Asp	Arg	Pro	Tyr	Tyr	Met	Ser	Lys
				290					295					300
Ser	Leu	Leu	Lys	Ile	Leu	Gly	Lys	Lys	Asn	Glu	Ala	Pro	Pro	Asp
				305					310					315
Asn	Lys	Lys	Arg	Lys	Lys									
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<210> 11
 <211> 1901
 <212> DNA
 <213> Homo Sapien

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<210> 12

<211> 457

<212> PRT

<213> Homo Sapien

<400> 12

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Cys	Leu	Cys	Gly	Ser	Ala	Pro	Cys	Ile	Leu	Cys	Ser	Cys	Cys	Pro
				20					25				30	

Ala	Ser	Arg	Asn	Ser	Thr	Val	Ser	Arg	Leu	Ile	Phe	Thr	Phe	Phe
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

35					40					45				
Leu	Phe	Leu	Gly	Val	Leu	Val	Ser	Ile	Ile	Met	Leu	Ser	Pro	Gly
				50					55					60
Val	Glu	Ser	Gln	Leu	Tyr	Lys	Leu	Pro	Trp	Val	Cys	Glu	Glu	Gly
				65					70					75
Ala	Gly	Ile	Pro	Thr	Val	Leu	Gln	Gly	His	Ile	Asp	Cys	Gly	Ser
				80					85					90
Leu	Leu	Gly	Tyr	Arg	Ala	Val	Tyr	Arg	Met	Cys	Phe	Ala	Thr	Ala
				95					100					105
Ala	Phe	Phe	Phe	Phe	Phe	Phe	Phe	Thr	Leu	Leu	Met	Leu	Cys	Val
				110					115					120
Ser	Ser	Arg	Asp	Pro	Arg	Ala	Ala	Ile	Gln	Asn	Gly	Phe	Trp	Phe
				125					130					135
Phe	Lys	Phe	Leu	Ile	Leu	Val	Gly	Leu	Thr	Val	Gly	Ala	Phe	Tyr
				140					145					150
Ile	Pro	Asp	Gly	Ser	Phe	Thr	Asn	Ile	Trp	Phe	Tyr	Phe	Gly	Val
				155					160					165
Val	Gly	Ser	Phe	Leu	Phe	Ile	Leu	Ile	Gln	Leu	Val	Leu	Leu	Ile
				170					175					180
Asp	Phe	Ala	His	Ser	Trp	Asn	Gln	Arg	Trp	Leu	Gly	Lys	Ala	Glu
				185					190					195
Glu	Cys	Asp	Ser	Arg	Ala	Trp	Tyr	Ala	Gly	Leu	Phe	Phe	Phe	Thr
				200					205					210
Leu	Leu	Phe	Tyr	Leu	Leu	Ser	Ile	Ala	Ala	Val	Ala	Leu	Met	Phe
				215					220					225
Met	Tyr	Tyr	Thr	Glu	Pro	Ser	Gly	Cys	His	Glu	Gly	Lys	Val	Phe
				230					235					240
Ile	Ser	Leu	Asn	Leu	Thr	Phe	Cys	Val	Cys	Val	Ser	Ile	Ala	Ala
				245					250					255
Val	Leu	Pro	Lys	Val	Gln	Asp	Ala	Gln	Pro	Asn	Ser	Gly	Leu	Leu
				260					265					270
Gln	Ala	Ser	Val	Ile	Thr	Leu	Tyr	Thr	Met	Phe	Val	Thr	Trp	Ser
				275					280					285
Ala	Leu	Ser	Ser	Ile	Pro	Glu	Gln	Lys	Cys	Asn	Pro	His	Leu	Pro
				290					295					300
Thr	Gln	Leu	Gly	Asn	Glu	Thr	Val	Val	Ala	Gly	Pro	Glu	Gly	Tyr
				305					310					315
Glu	Thr	Gln	Trp	Trp	Asp	Ala	Pro	Ser	Ile	Val	Gly	Leu	Ile	Ile

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Phe Leu Leu Cys Thr Leu Phe Ile Ser Leu Arg Ser Ser Asp His					
	335		340		345
Arg Gln Val Asn Ser Leu Met Gln Thr Glu Glu Cys Pro Pro Met					
	350		355		360
Leu Asp Ala Thr Gln Gln Gln Gln Gln Glu Val Ala Ala Cys Glu					
	365		370		375
Gly Arg Ala Phe Asp Asn Glu Gln Asp Gly Val Thr Tyr Ser Tyr					
	380		385		390
Ser Phe Phe His Phe Cys Leu Val Leu Ala Ser Leu His Val Met					
	395		400		405
Met Thr Leu Thr Asn Trp Tyr Lys Pro Gly Glu Thr Arg Lys Met					
	410		415		420
Ile Ser Thr Trp Thr Ala Val Trp Val Lys Ile Cys Ala Ser Trp					
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<211> 1572

<212> DNA

<213> Homo Sapien

<400> 13

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 Lys Gly Ile Ser Asp Val Arg Arg Thr Phe Cys Leu Phe Val Thr

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Val	Asn	Gly	Gly	Ile	Glu	Asn	Thr	Leu	Glu	Lys	Glu	Val	Met	Gln
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Tyr	Asp	Tyr	Tyr	Ser	Ser	Tyr	Phe	Asp	Ile	Phe	Leu	Leu	Ala	Val
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Phe	Arg	Phe	Lys	Val	Leu	Ile	Leu	Ala	Tyr	Ala	Val	Cys	Arg	Leu
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Arg	His	Trp	Trp	Ala	Ile	Ala	Leu	Thr	Thr	Ala	Val	Thr	Ser	Ala
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Phe	Leu	Leu	Ala	Lys	Val	Ile	Leu	Ser	Lys	Leu	Phe	Ser	Gln	Gly
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Ala	Phe	Gly	Tyr	Val	Leu	Pro	Ile	Ile	Ser	Phe	Ile	Leu	Ala	Trp
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Ile	Glu	Thr	Trp	Phe	Leu	Asp	Phe	Lys	Val	Leu	Pro	Gln	Glu	Ala
				170					175					180
Glu	Glu	Glu	Asn	Arg	Leu	Leu	Ile	Val	Gln	Asp	Ala	Ser	Glu	Arg
				185					190					195
Ala	Ala	Leu	Ile	Pro	Gly	Gly	Leu	Ser	Asp	Gly	Gln	Phe	Tyr	Ser
				200					205					210
Pro	Pro	Glu	Ser	Glu	Ala	Gly	Ser	Glu	Glu	Ala	Glu	Glu	Lys	Gln
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 <213> Homo Sapien

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<211> 673

<212> PRT

<213> Homo Sapien

<400> 16

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Leu	Thr	Arg	Leu	Arg	Leu	Ala	Gly	Asn	Thr	Arg	Ile	Ala	Gln	Leu	
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Arg	Pro	Glu	Asp	Leu	Ala	Gly	Leu	Ala	Ala	Leu	Gln	Glu	Leu	Asp	
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Asn	Cys	Val	Cys	Pro	Leu	Ser	Trp	Phe	Gly	Pro	Trp	Val	Arg	Glu	
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Ser	His	Val	Thr	Leu	Ala	Ser	Pro	Glu	Glu	Thr	Arg	Cys	His	Phe	
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Thr	Arg	Pro	Val	Val	Arg	Glu	Pro	Thr	Ala	Leu	Ser	Ser	Ser	Leu		365	370	375
Ala	Pro	Thr	Trp	Leu	Ser	Pro	Thr	Ala	Pro	Ala	Thr	Glu	Ala	Pro		380	385	390
Ser	Pro	Pro	Ser	Thr	Ala	Pro	Pro	Thr	Val	Gly	Pro	Val	Pro	Gln		395	400	405
Pro	Gln	Asp	Cys	Pro	Pro	Ser	Thr	Cys	Leu	Asn	Gly	Gly	Thr	Cys		410	415	420
His	Leu	Gly	Thr	Arg	His	His	Leu	Ala	Cys	Leu	Cys	Pro	Glu	Gly		425	430	435
Phe	Thr	Gly	Leu	Tyr	Cys	Glu	Ser	Gln	Met	Gly	Gln	Gly	Thr	Arg		440	445	450
Pro	Ser	Pro	Thr	Pro	Val	Thr	Pro	Arg	Pro	Pro	Arg	Ser	Leu	Thr		455	460	465
Leu	Gly	Ile	Glu	Pro	Val	Ser	Pro	Thr	Ser	Leu	Arg	Val	Gly	Leu		470	475	480
Gln	Arg	Tyr	Leu	Gln	Gly	Ser	Ser	Val	Gln	Leu	Arg	Ser	Leu	Arg		485	490	495
Leu	Thr	Tyr	Arg	Asn	Leu	Ser	Gly	Pro	Asp	Lys	Arg	Leu	Val	Thr		500	505	510
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Arg	Pro	Asn	Ala	Thr	Tyr	Ser	Val	Cys	Val	Met	Pro	Leu	Gly	Pro		530	535	540
Gly	Arg	Val	Pro	Glu	Gly	Glu	Glu	Ala	Cys	Gly	Glu	Ala	His	Thr		545	550	555
Pro	Pro	Ala	Val	His	Ser	Asn	His	Ala	Pro	Val	Thr	Gln	Ala	Arg		560	565	570
Glu	Gly	Asn	Leu	Pro	Leu	Leu	Ile	Ala	Pro	Ala	Leu	Ala	Ala	Val		575	580	585
Leu	Leu	Ala	Ala	Leu	Ala	Ala	Val	Gly	Ala	Ala	Tyr	Cys	Val	Arg		590	595	600
Arg	Gly	Arg	Ala	Met	Ala	Ala	Ala	Ala	Gln	Asp	Lys	Gly	Gln	Val		605	610	615

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 Leu Glu Pro Gly Pro Lys Ala Thr Glu Gly Gly Gly Glu Ala Leu
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 <212> DNA
 <213> Homo Sapien

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 <213> Homo Sapien

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 35 40 45
 Lys Asp His Thr Thr Ala Gly Arg Val Val Ala Gly Gln Ile Phe
 50 55 60
 Leu Asp Ser Glu Glu Ser Glu Leu Glu Ser Ser Ile Gln Glu Glu
 65 70 75
 Glu Asp Ser Leu Lys Ser Gln Glu Gly Glu Ser Val Thr Glu Asp
 80 85 90
 Ile Ser Phe Leu Glu Ser Pro Asn Pro Glu Asn Lys Asp Tyr Glu
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 Glu Pro Lys Lys Val Arg Lys Pro Ala Leu Thr Ala Ile Glu Gly
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Lys	Glu	Tyr	Asp	Glu	Cys	Thr	Ser	Asp	Gly	Arg	Glu	Asp	Gly	Arg	
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Leu	Trp	Cys	Ala	Thr	Thr	Tyr	Asp	Tyr	Lys	Ala	Asp	Glu	Lys	Trp	
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Gly	Phe	Cys	Glu	Thr	Glu	Glu	Glu	Ala	Ala	Lys	Arg	Arg	Gln	Met	
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Gln	Glu	Ala	Glu	Met	Met	Tyr	Gln	Thr	Gly	Met	Lys	Ile	Leu	Asn	
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				200					205					210	
Gln	Lys	Ala	Ala	Ser	Met	Asn	His	Thr	Lys	Ala	Leu	Glu	Arg	Val	
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Ser	Tyr	Ala	Leu	Leu	Phe	Gly	Asp	Tyr	Leu	Pro	Gln	Asn	Ile	Gln	
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Lys	Gly	Gln	Thr	Ala	Leu	Gly	Phe	Leu	Tyr	Ala	Ser	Gly	Leu	Gly	
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Val	Asn	Ser	Ser	Gln	Ala	Lys	Ala	Leu	Val	Tyr	Tyr	Thr	Phe	Gly	
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Ala	Leu	Gly	Gly	Asn	Leu	Ile	Ala	His	Met	Val	Leu	Val	Ser	Arg	
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Leu

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 <211> 1508
 <212> DNA
 <213> Homo Sapien

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 tatgaaattg gccgatttca agaacacatc tccttttcaa cccattcct 1150
 tatctgctcc aacctggact catttagatc gtgcttattt ggattgcaaa 1200
 agggagtccc accatcgtg gtggtatccc agggtcctg ctcaagtttt 1250
 ctttgaaaag gagggctgga atggtacatc acataggcaa gtccctgccct 1300
 gtatttaggc tttgctgct tgggtgtgat taagggaat tgaaagactt 1350
 gccattcaa aatgatcttt accgtggcct gcccctgct tatggtcccc 1400
 agcatttaca gtaacttgtg aatgttaagt atcatctctt atctaaatat 1450
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 aaaaaaaaa 1508

<210> 20

<211> 319

<212> PRT

<213> Homo Sapien

<400> 20

Met Leu Phe Trp Val Leu Gly Leu Leu Ile Leu Cys Gly Phe Leu

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Trp Thr Arg Lys Gly	Lys Leu Lys Ile	Glu Asp Ile Thr	Asp Lys
20		25	30
Tyr Ile Phe Ile Thr	Gly Cys Asp Ser	Gly Phe Gly Asn	Leu Ala
35		40	45
Ala Arg Thr Phe Asp	Lys Lys Gly Phe	His Val Ile Ala	Ala Cys
50		55	60
Leu Thr Glu Ser Gly	Ser Thr Ala Leu	Lys Ala Glu Thr	Ser Glu
65		70	75
Arg Leu Arg Thr Val	Leu Leu Asp Val	Thr Asp Pro Glu	Asn Val
80		85	90
Lys Arg Thr Ala Gln	Trp Val Lys Asn	Gln Val Gly Glu	Lys Gly
95		100	105
Leu Trp Gly Leu Ile	Asn Asn Ala Gly	Val Pro Gly Val	Leu Ala
110		115	120
Pro Thr Asp Trp Leu	Thr Leu Glu Asp	Tyr Arg Glu Pro	Ile Glu
125		130	135
Val Asn Leu Phe Gly	Leu Ile Ser Val	Thr Leu Asn Met	Leu Pro
140		145	150
Leu Val Lys Lys Ala	Gln Gly Arg Val	Ile Asn Val Ser	Ser Val
155		160	165
Gly Gly Arg Leu Ala	Ile Val Gly Gly	Gly Tyr Thr Pro	Ser Lys
170		175	180
Tyr Ala Val Glu Gly	Phe Asn Asp Ser	Leu Arg Arg Asp	Met Lys
185		190	195
Ala Phe Gly Val His	Val Ser Cys Ile	Glu Pro Gly Leu	Phe Lys
200		205	210
Thr Asn Leu Ala Asp	Pro Val Lys Val	Ile Glu Lys Lys	Leu Ala
215		220	225
Ile Trp Glu Gln Leu	Ser Pro Asp Ile	Lys Gln Gln Tyr	Gly Glu
230		235	240
Gly Tyr Ile Glu Lys	Ser Leu Asp Lys	Leu Lys Gly Asn	Lys Ser
245		250	255
Tyr Val Asn Met Asp	Leu Ser Pro Val	Val Glu Cys Met	Asp His
260		265	270
Ala Leu Thr Ser Leu	Phe Pro Lys Thr	His Tyr Ala Ala	Gly Lys
275		280	285
Asp Ala Lys Ile Phe	Trp Ile Pro Leu	Ser His Met Pro	Ala Ala

	290	295	300
Leu Gln Asp Phe Leu Leu Leu Lys Gln Lys Ala Glu Leu Ala Asn			
	305	310	315

Pro Lys Ala Val

<210> 21
 <211> 1849
 <212> DNA
 <213> Homo Sapien

<400> 21
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 acggaaggtt ttcttcttgg ggaagtaaaa ggtgaagcca agaacagcat 150
 tactgattcc caaatggatg atgttgaagt tgtttataca attgacattc 200
 agaaatatat tccatgctat cagcttttta gcttttataa ttcttcaggc 250
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 tgtggtagggt tggtaaaaat tccgtcgtca ttcagatcag atcatgacgt 350
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 gaccttgttt ttctgctatt aacaccaagt ataataacag aaagctgctc 450
 tactcatcga ctggaacatt ccttatataa acctcaaaaa ggactttttc 500
 acagggtacc tttagtgggt gccaatctgg gcatgtctga acaactgggt 550
 tataaaactg tatcagggtc ctgtatgtcc actggtttta gccgagcagt 600
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tgtagatatac acaagacaaa cgatctaaag caaatactgg tagtagtaac 1150
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<210> 22
 <211> 409
 <212> PRT
 <213> Homo Sapien

<400> 22
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 Gly Ala Leu Ala Phe Gln His Leu Asn Thr Asp Ser Asp Thr Glu
 20 25 30
 Gly Phe Leu Leu Gly Glu Val Lys Gly Glu Ala Lys Asn Ser Ile
 35 40 45
 Thr Asp Ser Gln Met Asp Asp Val Glu Val Val Tyr Thr Ile Asp
 50 55 60
 Ile Gln Lys Tyr Ile Pro Cys Tyr Gln Leu Phe Ser Phe Tyr Asn
 65 70 75
 Ser Ser Gly Glu Val Asn Glu Gln Ala Leu Lys Lys Ile Leu Ser
 80 85 90
 Asn Val Lys Lys Asn Val Val Gly Trp Tyr Lys Phe Arg Arg His
 95 100 105

Ser Asp Gln Ile	Met Thr Phe Arg Glu	Arg Leu Leu His Lys Asn	
	110	115	120
Leu Gln Glu His	Phe Ser Asn Gln Asp	Leu Val Phe Leu Leu Leu	
	125	130	135
Thr Pro Ser Ile	Ile Thr Glu Ser Cys	Ser Thr His Arg Leu Glu	
	140	145	150
His Ser Leu Tyr	Lys Pro Gln Lys Gly	Leu Phe His Arg Val Pro	
	155	160	165
Leu Val Val Ala	Asn Leu Gly Met Ser	Glu Gln Leu Gly Tyr Lys	
	170	175	180
Thr Val Ser Gly	Ser Cys Met Ser Thr	Gly Phe Ser Arg Ala Val	
	185	190	195
Gln Thr His Ser	Ser Lys Phe Phe Glu	Glu Asp Gly Ser Leu Lys	
	200	205	210
Glu Val His Lys	Ile Asn Glu Met Tyr	Ala Ser Leu Gln Glu Glu	
	215	220	225
Leu Lys Ser Ile	Cys Lys Lys Val Glu	Asp Ser Glu Gln Ala Val	
	230	235	240
Asp Lys Leu Val	Lys Asp Val Asn Arg	Leu Lys Arg Glu Ile Glu	
	245	250	255
Lys Arg Arg Gly	Ala Gln Ile Gln Ala	Ala Arg Glu Lys Asn Ile	
	260	265	270
Gln Lys Asp Pro	Gln Glu Asn Ile Phe	Leu Cys Gln Ala Leu Arg	
	275	280	285
Thr Phe Phe Pro	Asn Ser Glu Phe Leu	His Ser Cys Val Met Ser	
	290	295	300
Leu Lys Asn Arg	His Val Ser Lys Ser	Ser Cys Asn Tyr Asn His	
	305	310	315
His Leu Asp Val	Val Asp Asn Leu Thr	Leu Met Val Glu His Thr	
	320	325	330
Asp Ile Pro Glu	Ala Ser Pro Ala Ser	Thr Pro Gln Ile Ile Lys	
	335	340	345
His Lys Ala Leu	Asp Leu Asp Asp Arg	Trp Gln Phe Lys Arg Ser	
	350	355	360
Arg Leu Leu Asp	Thr Gln Asp Lys Arg	Ser Lys Ala Asn Thr Gly	
	365	370	375
Ser Ser Asn Gln	Asp Lys Ala Ser Lys	Met Ser Ser Pro Glu Thr	
	380	385	390

Asp Glu Glu Ile Glu Lys Met Lys Gly Phe Gly Glu Tyr Ser Arg
395 400 405

Ser Pro Thr Phe

<210> 23
<211> 2651
<212> DNA
<213> Homo Sapien

<400> 23
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cgccgcccac accctctgcg gtcccccgcg cgctgccac ctttccctcc 150
ttcccccggt ccccgccctcg ccggccagtc agcttgccgg gttcgctgcc 200
ccgcgaaacc ccgaggtcac cagcccgcgc ctctgcttcc ctgggcccgc 250
cgccgcctcc acgccctcct tctcccttgg cccggcgcct ggcaccgggg 300
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cgtctttacg tgtccaaagg cttcaacaag aacgatgcc cctccacga 650
gatcaacggt gatcatttga agatctgtcc ccagggttct acctgctgct 700
ctcaagagat ggaggagaag tacagcctgc aaagtaaaga tgatttcaaa 750
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 gattttgaat ggaacaattt catagatgct atgctgatgg tggcagagag 1400
 gctagagggg cctttcaaca ttgaatcggg catggatccc atcgatgtga 1450
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 cagaagggtt tccagggatg tggaccccc aagcccctcc cagctggacg 1550
 aatttctcgt tccatctctg aaagtgcctt cagtgtcgc ttcagaccac 1600
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 tttccaactg tgatctcgcc ttgtttctta caagcaaacc agggtcctt 2550
 cttggcacgt aacatgtacg tatttctgaa atattaaata gctgtacaga 2600

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c 2651

<210> 24

<211> 556

<212> PRT

<213> Homo Sapien

<400> 24

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Leu	Ser	Ala	Ala	Leu	Leu	Ala	Ala	Glu	Leu	Lys	Ser	Lys	Ser	Cys
				20					25					30

Ser	Glu	Val	Arg	Arg	Leu	Tyr	Val	Ser	Lys	Gly	Phe	Asn	Lys	Asn
				35					40					45

Asp	Ala	Pro	Leu	His	Glu	Ile	Asn	Gly	Asp	His	Leu	Lys	Ile	Cys
				50					55					60

Pro	Gln	Gly	Ser	Thr	Cys	Cys	Ser	Gln	Glu	Met	Glu	Glu	Lys	Tyr
				65					70					75

Ser	Leu	Gln	Ser	Lys	Asp	Asp	Phe	Lys	Ser	Val	Val	Ser	Glu	Gln
				80					85					90

Cys	Asn	His	Leu	Gln	Ala	Val	Phe	Ala	Ser	Arg	Tyr	Lys	Lys	Phe
				95					100					105

Asp	Glu	Phe	Phe	Lys	Glu	Leu	Leu	Glu	Asn	Ala	Glu	Lys	Ser	Leu
				110					115					120

Asn	Asp	Met	Phe	Val	Lys	Thr	Tyr	Gly	His	Leu	Tyr	Met	Gln	Asn
				125					130					135

Ser	Glu	Leu	Phe	Lys	Asp	Leu	Phe	Val	Glu	Leu	Lys	Arg	Tyr	Tyr
				140					145					150

Val	Val	Gly	Asn	Val	Asn	Leu	Glu	Glu	Met	Leu	Asn	Asp	Phe	Trp
				155					160					165

Ala	Arg	Leu	Leu	Glu	Arg	Met	Phe	Arg	Leu	Val	Asn	Ser	Gln	Tyr
				170					175					180

His	Phe	Thr	Asp	Glu	Tyr	Leu	Glu	Cys	Val	Ser	Lys	Tyr	Thr	Glu
				185					190					195

Gln	Leu	Lys	Pro	Phe	Gly	Asp	Val	Pro	Arg	Lys	Leu	Lys	Leu	Gln
				200					205					210

Val	Thr	Arg	Ala	Phe	Val	Ala	Ala	Arg	Thr	Phe	Ala	Gln	Gly	Leu
				215					220					225

Ala	Val	Ala	Gly	Asp	Val	Val	Ser	Lys	Val	Ser	Val	Val	Asn	Pro
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230	235	240
Thr Ala Gln Cys Thr His Ala Leu Leu Lys Met Ile Tyr Cys Ser		
245	250	255
His Cys Arg Gly Leu Val Thr Val Lys Pro Cys Tyr Asn Tyr Cys		
260	265	270
Ser Asn Ile Met Arg Gly Cys Leu Ala Asn Gln Gly Asp Leu Asp		
275	280	285
Phe Glu Trp Asn Asn Phe Ile Asp Ala Met Leu Met Val Ala Glu		
290	295	300
Arg Leu Glu Gly Pro Phe Asn Ile Glu Ser Val Met Asp Pro Ile		
305	310	315
Asp Val Lys Ile Ser Asp Ala Ile Met Asn Met Gln Asp Asn Ser		
320	325	330
Val Gln Val Ser Gln Lys Val Phe Gln Gly Cys Gly Pro Pro Lys		
335	340	345
Pro Leu Pro Ala Gly Arg Ile Ser Arg Ser Ile Ser Glu Ser Ala		
350	355	360
Phe Ser Ala Arg Phe Arg Pro His His Pro Glu Glu Arg Pro Thr		
365	370	375
Thr Ala Ala Gly Thr Ser Leu Asp Arg Leu Val Thr Asp Val Lys		
380	385	390
Glu Lys Leu Lys Gln Ala Lys Lys Phe Trp Ser Ser Leu Pro Ser		
395	400	405
Asn Val Cys Asn Asp Glu Arg Met Ala Ala Gly Asn Gly Asn Glu		
410	415	420
Asp Asp Cys Trp Asn Gly Lys Gly Lys Ser Arg Tyr Leu Phe Ala		
425	430	435
Val Thr Gly Asn Gly Leu Ala Asn Gln Gly Asn Asn Pro Glu Val		
440	445	450
Gln Val Asp Thr Ser Lys Pro Asp Ile Leu Ile Leu Arg Gln Ile		
455	460	465
Met Ala Leu Arg Val Met Thr Ser Lys Met Lys Asn Ala Tyr Asn		
470	475	480
Gly Asn Asp Val Asp Phe Phe Asp Ile Ser Asp Glu Ser Ser Gly		
485	490	495
Glu Gly Ser Gly Ser Gly Cys Glu Tyr Gln Gln Cys Pro Ser Glu		
500	505	510
Phe Asp Tyr Asn Ala Thr Asp His Ala Gly Lys Ser Ala Asn Glu		

	515		520		525									
Lys	Ala	Asp	Ser	Ala	Gly	Val	Arg	Pro	Gly	Ala	Gln	Ala	Tyr	Leu
	530								535					540
Leu	Thr	Val	Phe	Cys	Ile	Leu	Phe	Leu	Val	Met	Gln	Arg	Glu	Trp
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Arg

<210> 25

<211> 870

<212> DNA

<213> Homo Sapien

<400> 25

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ggaaccttcc attatattct tcaagcaact tacagctgca ccgacagttg 150

cgatgaaagt tctaattctct tccctcctcc tgttgctgcc actaatgctg 200

atgtccatgg tctctagcag cctgaatcca ggggtcgcca gaggccacag 250

ggaccgaggc caggcttcta ggagatggct ccaggaaggc ggccaagaat 300

gtgagtgcaa agatttggtc ctgagagccc cgagaagaaa attcatgaca 350

gtgtctgggc tgccaaagaa gcagtgcctc tgtgatcatt tcaagggcaa 400

tgtgaagaaa acaagacacc aaaggcacca cagaaagcca aacaagcatt 450

ccagagcctg ccagcaattt ctcaaacaat gtcagctaag aagctttgct 500

ctgcctttgt aggagctctg agcgcccact cttccaatta aacattctca 550

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actctccac tgtaccacc cctaaatcat tccagtgtc tcaaaaagca 650

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tcaaaaaaaaa aaaaaaaaaa 870

<210> 26

<211> 119

<212> PRT

<213> Homo Sapien

<400> 26
Met Lys Val Leu Ile Ser Ser Leu Leu Leu Leu Leu Pro Leu Met
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Leu Met Ser Met Val Ser Ser Ser Leu Asn Pro Gly Val Ala Arg
20 25 30
Gly His Arg Asp Arg Gly Gln Ala Ser Arg Arg Trp Leu Gln Glu
35 40 45
Gly Gly Gln Glu Cys Glu Cys Lys Asp Trp Phe Leu Arg Ala Pro
50 55 60
Arg Arg Lys Phe Met Thr Val Ser Gly Leu Pro Lys Lys Gln Cys
65 70 75
Pro Cys Asp His Phe Lys Gly Asn Val Lys Lys Thr Arg His Gln
80 85 90
Arg His His Arg Lys Pro Asn Lys His Ser Arg Ala Cys Gln Gln
95 100 105
Phe Leu Lys Gln Cys Gln Leu Arg Ser Phe Ala Leu Pro Leu
110 115

<210> 27
<211> 1371
<212> DNA
<213> Homo Sapien

<400> 27
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gcagctgctg gtgctgcttc ttaccctgcc cctgcacctc atggctctgc 150
tggtgctgctg gcagccctg tgcaaaagct acttccccta cctgatggcc 200
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cttcagccag ataaaggggc ttacaggagc ctccgggaaa gtggccctac 300
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 ccaccttctt cctgagctgg gggcaccagg gagaatcaga gatgctgggg 1300
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 taataaatag acgaaaccac g 1371

<210> 28
 <211> 277
 <212> PRT
 <213> Homo Sapien

<400> 28
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 Leu Cys Lys Ser Tyr Phe Pro Tyr Leu Met Ala Val Leu Thr Pro
 35 40 45
 Lys Ser Asn Arg Lys Met Glu Ser Lys Lys Arg Glu Leu Phe Ser
 50 55 60
 Gln Ile Lys Gly Leu Thr Gly Ala Ser Gly Lys Val Ala Leu Leu
 65 70 75
 Glu Leu Gly Cys Gly Thr Gly Ala Asn Phe Gln Phe Tyr Pro Pro
 80 85 90
 Gly Cys Arg Val Thr Cys Leu Asp Pro Asn Pro His Phe Glu Lys
 95 100 105
 Phe Leu Thr Lys Ser Met Ala Glu Asn Arg His Leu Gln Tyr Glu

	110		115		120
Arg Phe Val Val	Ala Pro Gly Glu Asp	Met Arg Gln Leu Ala Asp			
	125	130	135		
Gly Ser Met Asp	Val Val Val Cys Thr	Leu Val Leu Cys Ser Val			
	140	145	150		
Gln Ser Pro Arg	Lys Val Leu Gln Glu	Val Arg Arg Val Leu Arg			
	155	160	165		
Pro Gly Gly Val	Leu Phe Phe Trp Glu	His Val Ala Glu Pro Tyr			
	170	175	180		
Gly Ser Trp Ala	Phe Met Trp Gln Gln	Val Phe Glu Pro Thr Trp			
	185	190	195		
Lys His Ile Gly	Asp Gly Cys Cys Leu	Thr Arg Glu Thr Trp Lys			
	200	205	210		
Asp Leu Glu Asn	Ala Gln Phe Ser Glu	Ile Gln Met Glu Arg Gln			
	215	220	225		
Pro Pro Pro Leu	Lys Trp Leu Pro Val	Gly Pro His Ile Met Gly			
	230	235	240		
Lys Ala Val Lys	Gln Ser Phe Pro Ser	Ser Lys Ala Leu Ile Cys			
	245	250	255		
Ser Phe Pro Ser	Leu Gln Leu Glu Gln	Ala Thr His Gln Pro Ile			
	260	265	270		
Tyr Leu Pro Leu	Arg Gly Thr				
	275				

<210> 29
 <211> 494
 <212> DNA
 <213> Homo Sapien

<400> 29
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 gactgggtcgg tgcccagaaa gtctcttctg ccaactgacgc ccccatcagg 150
 gattgggect tctttccccc ttcctttctg tgtctcctgc ctcatcggcc 200
 tgccatgacc tgcagccaag ccagcccccg tggggaaggg gagaaagtgg 250
 gggatggcta agaaagctgg gagatagga acagaagagg gtagtgggtg 300
 ggctaggggg gctgccttat ttaaagtggg tgtttatgat tcttatacta 350
 atttatacaa agatattaag gccctgttca ttaagaaatt gttcccttcc 400

cctgtgttca atgtttgtaa agattgttct gtgtaaatat gtctttataa 450

taaacagtta aaagctgaaa aaaaaaaaaa aaaaaaaaaa aaaa 494

<210> 30
<211> 73
<212> PRT
<213> Homo Sapien

<400> 30
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Ser Cys Leu Glu Trp Gly Leu Val Gly Ala Gln Lys Val Ser Ser
20 25 30
Ala Thr Asp Ala Pro Ile Arg Asp Trp Ala Phe Phe Pro Pro Ser
35 40 45
Phe Leu Cys Leu Leu Pro His Arg Pro Ala Met Thr Cys Ser Gln
50 55 60
Ala Gln Pro Arg Gly Glu Gly Glu Lys Val Gly Asp Gly
65 70

<210> 31
<211> 1660
<212> DNA
<213> Homo Sapien

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atgatgttga caccctccac cgaattctaa gtggaatcat gtcgggaaga 200
gatacaatcc ttggcctgtg taccctcgca ttagccttgt ctttggccat 250
gatgtttacc ttcagattca tcaccacct tctggttcac attttcattt 300
cattggttat tttgggattg ttgtttgtct gcggtgtttt atggtggctg 350
tattatgact ataccaacga cctcagcata gaattggaca cagaaaggga 400
aaatatgaag tgcgtgctgg gggttgctat cgtatccaca ggcattcacg 450
cagtgtgct cgtcttgatt tttgtttctca gaaagagaat aaaattgaca 500
gttgagcttt tccaaatcac aaataaagcc atcagcagtg ctcccttcct 550
gctgttccag cactgtgga catttgccat cctcattttc ttctgggtcc 600
tctgggtggc tgtgctgctg agcctgggaa ctgcaggagc tgcccagggt 650
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gtggtcgtag catttaattg gcctcatctg gactagttaa ttcacccctg 750
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 agaagtaaaa atgatccctcc tgatcatccc atcctttcgt ctctctccat 850
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 ctgctgtttc tgggtgtcttg acaaatacct gctccatctc aaccagaatg 1050
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 gatgcattca aaatcttgtc caagaactca agtcacttta catctattaa 1150
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 ttcctcaaaa 1660

<210> 32
 <211> 445
 <212> PRT
 <213> Homo Sapien

<400> 32
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 20 25 30
 Leu Leu Val His Ile Phe Ile Ser Leu Val Ile Leu Gly Leu Leu
 35 40 45
 Phe Val Cys Gly Val Leu Trp Trp Leu Tyr Tyr Asp Tyr Thr Asn
 50 55 60

Asp	Leu	Ser	Ile	Glu	Leu	Asp	Thr	Glu	Arg	Glu	Asn	Met	Lys	Cys	
				65					70					75	
Val	Leu	Gly	Phe	Ala	Ile	Val	Ser	Thr	Gly	Ile	Thr	Ala	Val	Leu	
				80					85					90	
Leu	Val	Leu	Ile	Phe	Val	Leu	Arg	Lys	Arg	Ile	Lys	Leu	Thr	Val	
				95					100					105	
Glu	Leu	Phe	Gln	Ile	Thr	Asn	Lys	Ala	Ile	Ser	Ser	Ala	Pro	Phe	
				110					115					120	
Leu	Leu	Phe	Gln	Pro	Leu	Trp	Thr	Phe	Ala	Ile	Leu	Ile	Phe	Phe	
				125					130					135	
Trp	Val	Leu	Trp	Val	Ala	Val	Leu	Leu	Ser	Leu	Gly	Thr	Ala	Gly	
				140					145					150	
Ala	Ala	Gln	Val	Met	Glu	Gly	Gly	Gln	Val	Glu	Tyr	Lys	Pro	Leu	
				155					160					165	
Ser	Gly	Ile	Arg	Tyr	Met	Trp	Ser	Tyr	His	Leu	Ile	Gly	Leu	Ile	
				170					175					180	
Trp	Thr	Ser	Glu	Phe	Ile	Leu	Ala	Cys	Gln	Gln	Met	Thr	Ile	Ala	
				185					190					195	
Gly	Ala	Val	Val	Thr	Cys	Tyr	Phe	Asn	Arg	Ser	Lys	Asn	Asp	Pro	
				200					205					210	
Pro	Asp	His	Pro	Ile	Leu	Ser	Ser	Leu	Ser	Ile	Leu	Phe	Phe	Tyr	
				215					220					225	
His	Gln	Gly	Thr	Val	Val	Lys	Gly	Ser	Phe	Leu	Ile	Ser	Val	Val	
				230					235					240	
Arg	Ile	Pro	Arg	Ile	Ile	Val	Met	Tyr	Met	Gln	Asn	Ala	Leu	Lys	
				245					250					255	
Glu	Gln	Gln	His	Gly	Ala	Leu	Ser	Arg	Tyr	Leu	Phe	Arg	Cys	Cys	
				260					265					270	
Tyr	Cys	Cys	Phe	Trp	Cys	Leu	Asp	Lys	Tyr	Leu	Leu	His	Leu	Asn	
				275					280					285	
Gln	Asn	Ala	Tyr	Thr	Thr	Thr	Ala	Ile	Asn	Gly	Thr	Asp	Phe	Cys	
				290					295					300	
Thr	Ser	Ala	Lys	Asp	Ala	Phe	Lys	Ile	Leu	Ser	Lys	Asn	Ser	Ser	
				305					310					315	
His	Phe	Thr	Ser	Ile	Asn	Cys	Phe	Gly	Asp	Phe	Ile	Ile	Phe	Leu	
				320					325					330	
Gly	Lys	Val	Leu	Val	Val	Cys	Phe	Thr	Val	Phe	Gly	Gly	Leu	Met	
				335					340					345	

Ala	Phe	Asn	Tyr	Asn	Arg	Ala	Phe	Gln	Val	Trp	Ala	Val	Pro	Leu	
				350					355					360	
Leu	Leu	Val	Ala	Phe	Phe	Ala	Tyr	Leu	Val	Ala	His	Ser	Phe	Leu	
				365					370					375	
Ser	Val	Phe	Glu	Thr	Val	Leu	Asp	Ala	Leu	Phe	Leu	Cys	Phe	Ala	
				380					385					390	
Val	Asp	Leu	Glu	Thr	Asn	Asp	Gly	Ser	Ser	Glu	Lys	Pro	Tyr	Phe	
				395					400					405	
Met	Asp	Gln	Glu	Phe	Leu	Ser	Phe	Val	Lys	Arg	Ser	Asn	Lys	Leu	
				410					415					420	
Asn	Asn	Ala	Arg	Ala	Gln	Gln	Asp	Lys	His	Ser	Leu	Arg	Asn	Glu	
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Glu	Gly	Thr	Glu	Leu	Gln	Ala	Ile	Val	Arg						
				440					445						

<210> 33
 <211> 2773
 <212> DNA
 <213> Homo Sapien

<400> 33
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 ttctcactat gaaggcatct gttattgaaa tgttccttgt tttgctggtg 250

 actggagtac attcaaaca agaaacggca aagaagatta aaaggcccaa 300

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 atcctgagtt cattgtgaaa tgtccagcag gatgccaaga ccccaaatac 400

 catgtttatg gcactgacgt gtatgcatcc tactccagtg tgtgtggcgc 450

 tgccgtacac agtgggtgtg ttgataattc aggagggaaa atacttggtc 500

 ggaagggtgc tggacagtct gggtacaaag ggagttattc caacggtgtc 550

 caatcggtat ccctaccacg atggagagaa tccttttatcg tcttagaaag 600

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<210> 34
 <211> 678
 <212> PRT
 <213> Homo Sapien

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 Phe Leu Val Leu Leu Val Thr Gly Val His Ser Asn Lys Glu Thr
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 Ala Lys Lys Ile Lys Arg Pro Lys Phe Thr Val Pro Gln Ile Asn
 35 40 45
 Cys Asp Val Lys Ala Gly Lys Ile Ile Asp Pro Glu Phe Ile Val
 50 55 60
 Lys Cys Pro Ala Gly Cys Gln Asp Pro Lys Tyr His Val Tyr Gly
 65 70 75
 Thr Asp Val Tyr Ala Ser Tyr Ser Ser Val Cys Gly Ala Ala Val
 80 85 90
 His Ser Gly Val Leu Asp Asn Ser Gly Gly Lys Ile Leu Val Arg
 95 100 105
 Lys Val Ala Gly Gln Ser Gly Tyr Lys Gly Ser Tyr Ser Asn Gly
 110 115 120
 Val Gln Ser Leu Ser Leu Pro Arg Trp Arg Glu Ser Phe Ile Val
 125 130 135

Leu Glu Ser Lys	Pro Lys Lys Gly Val	Thr Tyr Pro Ser Ala Leu	140	145	150
Thr Tyr Ser Ser	Ser Lys Ser Pro Ala	Ala Gln Ala Gly Glu Thr	155	160	165
Thr Lys Ala Tyr	Gln Arg Pro Pro Ile	Pro Gly Thr Thr Ala Gln	170	175	180
Pro Val Thr Leu	Met Gln Leu Leu Ala	Val Thr Val Ala Val Ala	185	190	195
Thr Pro Thr Thr	Leu Pro Arg Pro Ser	Pro Ser Ala Ala Ser Thr	200	205	210
Thr Ser Ile Pro	Arg Pro Gln Ser Val	Gly His Arg Ser Gln Glu	215	220	225
Met Asp Leu Trp	Ser Thr Ala Thr Tyr	Thr Ser Ser Gln Asn Arg	230	235	240
Pro Arg Ala Asp	Pro Gly Ile Gln Arg	Gln Asp Pro Ser Gly Ala	245	250	255
Ala Phe Gln Lys	Pro Val Gly Ala Asp	Val Ser Leu Gly Leu Val	260	265	270
Pro Lys Glu Glu	Leu Ser Thr Gln Ser	Leu Glu Pro Val Ser Leu	275	280	285
Gly Asp Pro Asn	Cys Lys Ile Asp Leu	Ser Phe Leu Ile Asp Gly	290	295	300
Ser Thr Ser Ile	Gly Lys Arg Arg Phe	Arg Ile Gln Lys Gln Leu	305	310	315
Leu Ala Asp Val	Ala Gln Ala Leu Asp	Ile Gly Pro Ala Gly Pro	320	325	330
Leu Met Gly Val	Val Gln Tyr Gly Asp	Asn Pro Ala Thr His Phe	335	340	345
Asn Leu Lys Thr	His Thr Asn Ser Arg	Asp Leu Lys Thr Ala Ile	350	355	360
Glu Lys Ile Thr	Gln Arg Gly Gly Leu	Ser Asn Val Gly Arg Ala	365	370	375
Ile Ser Phe Val	Thr Lys Asn Phe Phe	Ser Lys Ala Asn Gly Asn	380	385	390
Arg Ser Gly Ala	Pro Asn Val Val Val	Val Met Val Asp Gly Trp	395	400	405
Pro Thr Asp Lys	Val Glu Glu Ala Ser	Arg Leu Ala Arg Glu Ser	410	415	420

Gly	Ile	Asn	Ile	Phe	Phe	Ile	Thr	Ile	Glu	Gly	Ala	Ala	Glu	Asn	
				425					430					435	
Glu	Lys	Gln	Tyr	Val	Val	Glu	Pro	Asn	Phe	Ala	Asn	Lys	Ala	Val	
				440					445					450	
Cys	Arg	Thr	Asn	Gly	Phe	Tyr	Ser	Leu	His	Val	Gln	Ser	Trp	Phe	
				455					460					465	
Gly	Leu	His	Lys	Thr	Leu	Gln	Pro	Leu	Val	Lys	Arg	Val	Cys	Asp	
				470					475					480	
Thr	Asp	Arg	Leu	Ala	Cys	Ser	Lys	Thr	Cys	Leu	Asn	Ser	Ala	Asp	
				485					490					495	
Ile	Gly	Phe	Val	Ile	Asp	Gly	Ser	Ser	Ser	Val	Gly	Thr	Gly	Asn	
				500					505					510	
Phe	Arg	Thr	Val	Leu	Gln	Phe	Val	Thr	Asn	Leu	Thr	Lys	Glu	Phe	
				515					520					525	
Glu	Ile	Ser	Asp	Thr	Asp	Thr	Arg	Ile	Gly	Ala	Val	Gln	Tyr	Thr	
				530					535					540	
Tyr	Glu	Gln	Arg	Leu	Glu	Phe	Gly	Phe	Asp	Lys	Tyr	Ser	Ser	Lys	
				545					550					555	
Pro	Asp	Ile	Leu	Asn	Ala	Ile	Lys	Arg	Val	Gly	Tyr	Trp	Ser	Gly	
				560					565					570	
Gly	Thr	Ser	Thr	Gly	Ala	Ala	Ile	Asn	Phe	Ala	Leu	Glu	Gln	Leu	
				575					580					585	
Phe	Lys	Lys	Ser	Lys	Pro	Asn	Lys	Arg	Lys	Leu	Met	Ile	Leu	Ile	
				590					595					600	
Thr	Asp	Gly	Arg	Ser	Tyr	Asp	Asp	Val	Arg	Ile	Pro	Ala	Met	Ala	
				605					610					615	
Ala	His	Leu	Lys	Gly	Val	Ile	Thr	Tyr	Ala	Ile	Gly	Val	Ala	Trp	
				620					625					630	
Ala	Ala	Gln	Glu	Glu	Leu	Glu	Val	Ile	Ala	Thr	His	Pro	Ala	Arg	
				635					640					645	
Asp	His	Ser	Phe	Phe	Val	Asp	Glu	Phe	Asp	Asn	Leu	His	Gln	Tyr	
				650					655					660	
Val	Pro	Arg	Ile	Ile	Gln	Asn	Ile	Cys	Thr	Glu	Phe	Asn	Ser	Gln	
				665					670					675	

Pro Arg Asn

<210> 35
 <211> 2095
 <212> DNA

<213> Homo Sapien

<400> 35

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<210> 36
 <211> 331
 <212> PRT
 <213> Homo Sapien

<400> 36
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 Phe Val Met Trp Tyr Leu Ser Leu Pro His Tyr Asn Val Ile Glu
 35 40 45
 Arg Val Asn Trp Met Tyr Phe Tyr Glu Tyr Glu Pro Ile Tyr Arg
 50 55 60
 Gln Asp Phe His Phe Thr Leu Arg Glu His Ser Asn Cys Ser His
 65 70 75
 Gln Asn Pro Phe Leu Val Ile Leu Val Thr Ser His Pro Ser Asp
 80 85 90
 Val Lys Ala Arg Gln Ala Ile Arg Val Thr Trp Gly Glu Lys Lys
 95 100 105

Ser Trp Trp Gly Tyr Glu Val Leu Thr Phe Phe Leu Leu Gly Gln	110	115	120
Glu Ala Glu Lys Glu Asp Lys Met Leu Ala Leu Ser Leu Glu Asp	125	130	135
Glu His Leu Leu Tyr Gly Asp Ile Ile Arg Gln Asp Phe Leu Asp	140	145	150
Thr Tyr Asn Asn Leu Thr Leu Lys Thr Ile Met Ala Phe Arg Trp	155	160	165
Val Thr Glu Phe Cys Pro Asn Ala Lys Tyr Val Met Lys Thr Asp	170	175	180
Thr Asp Val Phe Ile Asn Thr Gly Asn Leu Val Lys Tyr Leu Leu	185	190	195
Asn Leu Asn His Ser Glu Lys Phe Phe Thr Gly Tyr Pro Leu Ile	200	205	210
Asp Asn Tyr Ser Tyr Arg Gly Phe Tyr Gln Lys Thr His Ile Ser	215	220	225
Tyr Gln Glu Tyr Pro Phe Lys Val Phe Pro Pro Tyr Cys Ser Gly	230	235	240
Leu Gly Tyr Ile Met Ser Arg Asp Leu Val Pro Arg Ile Tyr Glu	245	250	255
Met Met Gly His Val Lys Pro Ile Lys Phe Glu Asp Val Tyr Val	260	265	270
Gly Ile Cys Leu Asn Leu Leu Lys Val Asn Ile His Ile Pro Glu	275	280	285
Asp Thr Asn Leu Phe Phe Leu Tyr Arg Ile His Leu Asp Val Cys	290	295	300
Gln Leu Arg Arg Val Ile Ala Ala His Gly Phe Ser Ser Lys Glu	305	310	315
Ile Ile Thr Phe Trp Gln Val Met Leu Arg Asn Thr Thr Cys His	320	325	330

Tyr

<210> 37

<211> 2846

<212> DNA

<213> Homo Sapien

<400> 37

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tggggctcac ttttcttcag ctcttctca tctcgtcctt gccaaagagag 100

tacacagtca ttaatgaagc ctgccctgga gcagagtgga atatcatgtg 150
 tcgggagtg c tgtgaatatg atcagattga gtgcgtctgc cccggaaaga 200
 ggggaagtcgt ggggttatacc atcccttgct gcaggaatga ggagaatgag 250
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 gagctgccga aatggctcat gggggggtac cttggatgac ttctatgtga 350
 aggggttcta ctgtgcagag tgccgagcag gctggtacgg aggagactgc 400
 atgcgatgtg gccaggttct gcgagcccca aagggtcaga ttttgttgga 450
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<210> 38
 <211> 720
 <212> PRT
 <213> Homo Sapien

<400> 38

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Leu	Leu	Leu	Ile	Ser	Ser	Leu	Pro	Arg	Glu	Tyr	Thr	Val	Ile	Asn
				20					25					30
Glu	Ala	Cys	Pro	Gly	Ala	Glu	Trp	Asn	Ile	Met	Cys	Arg	Glu	Cys
				35					40					45
Cys	Glu	Tyr	Asp	Gln	Ile	Glu	Cys	Val	Cys	Pro	Gly	Lys	Arg	Glu
				50					55					60
Val	Val	Gly	Tyr	Thr	Ile	Pro	Cys	Cys	Arg	Asn	Glu	Glu	Asn	Glu
				65					70					75
Cys	Asp	Ser	Cys	Leu	Ile	His	Pro	Gly	Cys	Thr	Ile	Phe	Glu	Asn
				80					85					90
Cys	Lys	Ser	Cys	Arg	Asn	Gly	Ser	Trp	Gly	Gly	Thr	Leu	Asp	Asp
				95					100					105
Phe	Tyr	Val	Lys	Gly	Phe	Tyr	Cys	Ala	Glu	Cys	Arg	Ala	Gly	Trp
				110					115					120
Tyr	Gly	Gly	Asp	Cys	Met	Arg	Cys	Gly	Gln	Val	Leu	Arg	Ala	Pro
				125					130					135
Lys	Gly	Gln	Ile	Leu	Leu	Glu	Ser	Tyr	Pro	Leu	Asn	Ala	His	Cys
				140					145					150
Glu	Trp	Thr	Ile	His	Ala	Lys	Pro	Gly	Phe	Val	Ile	Gln	Leu	Arg
				155					160					165
Phe	Val	Met	Leu	Ser	Leu	Glu	Phe	Asp	Tyr	Met	Cys	Gln	Tyr	Asp
				170					175					180
Tyr	Val	Glu	Val	Arg	Asp	Gly	Asp	Asn	Arg	Asp	Gly	Gln	Ile	Ile
				185					190					195
Lys	Arg	Val	Cys	Gly	Asn	Glu	Arg	Pro	Ala	Pro	Ile	Gln	Ser	Ile
				200					205					210
Gly	Ser	Ser	Leu	His	Val	Leu	Phe	His	Ser	Asp	Gly	Ser	Lys	Asn
				215					220					225
Phe	Asp	Gly	Phe	His	Ala	Ile	Tyr	Glu	Glu	Ile	Thr	Ala	Cys	Ser
				230					235					240
Ser	Ser	Pro	Cys	Phe	His	Asp	Gly	Thr	Cys	Val	Leu	Asp	Lys	Ala
				245					250					255
Gly	Ser	Tyr	Lys	Cys	Ala	Cys	Leu	Ala	Gly	Tyr	Thr	Gly	Gln	Arg
				260					265					270
Cys	Glu	Asn	Leu	Leu	Glu	Glu	Arg	Asn	Cys	Ser	Asp	Pro	Gly	Gly
				275					280					285

Pro Val Asn Gly Tyr Gln Lys Ile Thr Gly Gly Pro Gly Leu Ile	290	295	300
Asn Gly Arg His Ala Lys Ile Gly Thr Val Val Ser Phe Phe Cys	305	310	315
Asn Asn Ser Tyr Val Leu Ser Gly Asn Glu Lys Arg Thr Cys Gln	320	325	330
Gln Asn Gly Glu Trp Ser Gly Lys Gln Pro Ile Cys Ile Lys Ala	335	340	345
Cys Arg Glu Pro Lys Ile Ser Asp Leu Val Arg Arg Arg Val Leu	350	355	360
Pro Met Gln Val Gln Ser Arg Glu Thr Pro Leu His Gln Leu Tyr	365	370	375
Ser Ala Ala Phe Ser Lys Gln Lys Leu Gln Ser Ala Pro Thr Lys	380	385	390
Lys Pro Ala Leu Pro Phe Gly Asp Leu Pro Met Gly Tyr Gln His	395	400	405
Leu His Thr Gln Leu Gln Tyr Glu Cys Ile Ser Pro Phe Tyr Arg	410	415	420
Arg Leu Gly Ser Ser Arg Arg Thr Cys Leu Arg Thr Gly Lys Trp	425	430	435
Ser Gly Arg Ala Pro Ser Cys Ile Pro Ile Cys Gly Lys Ile Glu	440	445	450
Asn Ile Thr Ala Pro Lys Thr Gln Gly Leu Arg Trp Pro Trp Gln	455	460	465
Ala Ala Ile Tyr Arg Arg Thr Ser Gly Val His Asp Gly Ser Leu	470	475	480
His Lys Gly Ala Trp Phe Leu Val Cys Ser Gly Ala Leu Val Asn	485	490	495
Glu Arg Thr Val Val Val Ala Ala His Cys Val Thr Asp Leu Gly	500	505	510
Lys Val Thr Met Ile Lys Thr Ala Asp Leu Lys Val Val Leu Gly	515	520	525
Lys Phe Tyr Arg Asp Asp Asp Arg Asp Glu Lys Thr Ile Gln Ser	530	535	540
Leu Gln Ile Ser Ala Ile Ile Leu His Pro Asn Tyr Asp Pro Ile	545	550	555
Leu Leu Asp Ala Asp Ile Ala Ile Leu Lys Leu Leu Asp Lys Ala	560	565	570

Arg	Ile	Ser	Thr	Arg	Val	Gln	Pro	Ile	Cys	Leu	Ala	Ala	Ser	Arg	575	580	585
Asp	Leu	Ser	Thr	Ser	Phe	Gln	Glu	Ser	His	Ile	Thr	Val	Ala	Gly	590	595	600
Trp	Asn	Val	Leu	Ala	Asp	Val	Arg	Ser	Pro	Gly	Phe	Lys	Asn	Asp	605	610	615
Thr	Leu	Arg	Ser	Gly	Val	Val	Ser	Val	Val	Asp	Ser	Leu	Leu	Cys	620	625	630
Glu	Glu	Gln	His	Glu	Asp	His	Gly	Ile	Pro	Val	Ser	Val	Thr	Asp	635	640	645
Asn	Met	Phe	Cys	Ala	Ser	Trp	Glu	Pro	Thr	Ala	Pro	Ser	Asp	Ile	650	655	660
Cys	Thr	Ala	Glu	Thr	Gly	Gly	Ile	Ala	Ala	Val	Ser	Phe	Pro	Gly	665	670	675
Arg	Ala	Ser	Pro	Glu	Pro	Arg	Trp	His	Leu	Met	Gly	Leu	Val	Ser	680	685	690
Trp	Ser	Tyr	Asp	Lys	Thr	Cys	Ser	His	Arg	Leu	Ser	Thr	Ala	Phe	695	700	705
Thr	Lys	Val	Leu	Pro	Phe	Lys	Asp	Trp	Ile	Glu	Arg	Asn	Met	Lys	710	715	720

<210> 39
 <211> 2571
 <212> DNA
 <213> Homo Sapien

<400> 39
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 ttgtgatcta ctgattgtgg gggcatggca aggtttgctt aaaggagctt 150
 ggctgggttg ggcccttgta gctgacagaa ggtggccagg gagaatgcag 200
 cacactgctc ggagaatgaa ggcgcttctg ttgctgggtc tgccttggtc 250
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 cagaactctg taaaggtgcc tccactacg gcctgaccaa agataggaag 350
 aggcgctcac aagatggctg tccagacggc tgtgagagcc tcacagccac 400
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 cagccagcaa tcagcccagt ggactctggc cggagcaacc gaactagggc 550

acggcccttt gagagatcca ctattagaag cagatcattt aaaaaataa 600
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 aaccatgccg accagggcag ggaaaattct gaaaacacca ctgcccctga 700
 agtctttcca aggttgtagc acctgattcc agatggtgaa attaccagca 750
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<210> 40

<211> 632

<212> PRT

<213> Homo Sapien

<400> 40

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Asn	Tyr	Ile	Asp	Asn	Val	Gly	Asn	Leu	His	Phe	Leu	Tyr	Ser	Glu
			20					25						30
Leu	Cys	Lys	Gly	Ala	Ser	His	Tyr	Gly	Leu	Thr	Lys	Asp	Arg	Lys
			35					40						45
Arg	Arg	Ser	Gln	Asp	Gly	Cys	Pro	Asp	Gly	Cys	Ala	Ser	Leu	Thr
			50					55						60
Ala	Thr	Ala	Pro	Ser	Pro	Glu	Val	Ser	Ala	Ala	Ala	Thr	Ile	Ser
			65					70						75
Leu	Met	Thr	Asp	Glu	Pro	Gly	Leu	Asp	Asn	Pro	Ala	Tyr	Val	Ser
			80					85						90
Ser	Ala	Glu	Asp	Gly	Gln	Pro	Ala	Ile	Ser	Pro	Val	Asp	Ser	Gly
			95					100						105
Arg	Ser	Asn	Arg	Thr	Arg	Ala	Arg	Pro	Phe	Glu	Arg	Ser	Thr	Ile
			110					115						120
Arg	Ser	Arg	Ser	Phe	Lys	Lys	Ile	Asn	Arg	Ala	Leu	Ser	Val	Leu

				125					130					135
Arg	Arg	Thr	Lys	Ser	Gly	Ser	Ala	Val	Ala	Asn	His	Ala	Asp	Gln
				140					145					150
Gly	Arg	Glu	Asn	Ser	Glu	Asn	Thr	Thr	Ala	Pro	Glu	Val	Phe	Pro
				155					160					165
Arg	Leu	Tyr	His	Leu	Ile	Pro	Asp	Gly	Glu	Ile	Thr	Ser	Ile	Lys
				170					175					180
Ile	Asn	Arg	Val	Asp	Pro	Ser	Glu	Ser	Leu	Ser	Ile	Arg	Leu	Val
				185					190					195
Gly	Gly	Ser	Glu	Thr	Pro	Leu	Val	His	Ile	Ile	Ile	Gln	His	Ile
				200					205					210
Tyr	Arg	Asp	Gly	Val	Ile	Ala	Arg	Asp	Gly	Arg	Leu	Leu	Pro	Gly
				215					220					225
Asp	Ile	Ile	Leu	Lys	Val	Asn	Gly	Met	Asp	Ile	Ser	Asn	Val	Pro
				230					235					240
His	Asn	Tyr	Ala	Val	Arg	Leu	Leu	Arg	Gln	Pro	Cys	Gln	Val	Leu
				245					250					255
Trp	Leu	Thr	Val	Met	Arg	Glu	Gln	Lys	Phe	Arg	Ser	Arg	Asn	Asn
				260					265					270
Gly	Gln	Ala	Pro	Asp	Ala	Tyr	Arg	Pro	Arg	Asp	Asp	Ser	Phe	His
				275					280					285
Val	Ile	Leu	Asn	Lys	Ser	Ser	Pro	Glu	Glu	Gln	Leu	Gly	Ile	Lys
				290					295					300
Leu	Val	Arg	Lys	Val	Asp	Glu	Pro	Gly	Val	Phe	Ile	Phe	Asn	Val
				305					310					315
Leu	Asp	Gly	Gly	Val	Ala	Tyr	Arg	His	Gly	Gln	Leu	Glu	Glu	Asn
				320					325					330
Asp	Arg	Val	Leu	Ala	Ile	Asn	Gly	His	Asp	Leu	Arg	Tyr	Gly	Ser
				335					340					345
Pro	Glu	Ser	Ala	Ala	His	Leu	Ile	Gln	Ala	Ser	Glu	Arg	Arg	Val
				350					355					360
His	Leu	Val	Val	Ser	Arg	Gln	Val	Arg	Gln	Arg	Ser	Pro	Asp	Ile
				365					370					375
Phe	Gln	Glu	Ala	Gly	Trp	Asn	Ser	Asn	Gly	Ser	Trp	Ser	Pro	Gly
				380					385					390
Pro	Gly	Glu	Arg	Ser	Asn	Thr	Pro	Lys	Pro	Leu	His	Pro	Thr	Ile
				395					400					405
Thr	Cys	His	Glu	Lys	Val	Val	Asn	Ile	Gln	Lys	Asp	Pro	Gly	Glu

410					415					420				
Ser	Leu	Gly	Met	Thr	Val	Ala	Gly	Gly	Ala	Ser	His	Arg	Glu	Trp
			425						430				435	
Asp	Leu	Pro	Ile	Tyr	Val	Ile	Ser	Val	Glu	Pro	Gly	Gly	Val	Ile
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Ser	Arg	Asp	Gly	Arg	Ile	Lys	Thr	Gly	Asp	Ile	Leu	Leu	Asn	Val
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Asp	Gly	Val	Glu	Leu	Thr	Glu	Val	Ser	Arg	Ser	Glu	Ala	Val	Ala
			470						475				480	
Leu	Leu	Lys	Arg	Thr	Ser	Ser	Ser	Ile	Val	Leu	Lys	Ala	Leu	Glu
			485						490				495	
Val	Lys	Glu	Tyr	Glu	Pro	Gln	Glu	Asp	Cys	Ser	Ser	Pro	Ala	Ala
			500						505				510	
Leu	Asp	Ser	Asn	His	Asn	Met	Ala	Pro	Pro	Ser	Asp	Trp	Ser	Pro
			515						520				525	
Ser	Trp	Val	Met	Trp	Leu	Glu	Leu	Pro	Arg	Cys	Leu	Tyr	Asn	Cys
			530						535				540	
Lys	Asp	Ile	Val	Leu	Arg	Arg	Asn	Thr	Ala	Gly	Ser	Leu	Gly	Phe
			545						550				555	
Cys	Ile	Val	Gly	Gly	Tyr	Glu	Glu	Tyr	Asn	Gly	Asn	Lys	Pro	Phe
			560						565				570	
Phe	Ile	Lys	Ser	Ile	Val	Glu	Gly	Thr	Pro	Ala	Tyr	Asn	Asp	Gly
			575						580				585	
Arg	Ile	Arg	Cys	Gly	Asp	Ile	Leu	Leu	Ala	Val	Asn	Gly	Arg	Ser
			590						595				600	
Thr	Ser	Gly	Met	Ile	His	Ala	Cys	Leu	Ala	Arg	Leu	Leu	Lys	Glu
			605						610				615	
Leu	Lys	Gly	Arg	Ile	Thr	Leu	Thr	Ile	Val	Ser	Trp	Pro	Gly	Thr
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Phe Leu

<210> 41
 <211> 1964
 <212> DNA
 <213> Homo Sapien

<400> 41
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 agctcaactt gaagctttct tgctgcagc gaagcagaga gatagatatt 100

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 caaattccga ttactgttgc tgttgacttt gtgcctgaca gtggttgggt 200
 gggccaccag taactacttc gtgggtgcca ttcaagagat tcctaaagca 250
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 cttctgtgtc tccttacctc agaggccaga gcaagctcat tttcaaacca 400
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 ttccccaccg gaacagagag aaacacctga tgtacctgct ggaacatctg 550
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 ccaggctgaa ggtaaaaagt ttaatcgagc caaactcttg aatgtgggct 650
 atctagaagc cctcaaggaa gaaaattggg actgctttat attccacgat 700
 gtggacctgg tacccgagaa tgactttaac ctttacaagt gtgaggagca 750
 tcccaagcat ctggtggttg gcaggaacag cactgggtac aggttacggt 800
 acagtggata ttttgggggt gttactgccc taagcagaga gcagtttttc 850
 aagggtgaatg gattctctaa caactactgg ggatggggag gcgaagacga 900
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 tgccctgaagt gggtaaatat acaatggtct tccacactag agacaaaggc 1000
 aatgaggtga acgcagaacg gatgaagctc ttacaccaag tgtcacgagt 1050
 ctggagaaca gatgggttga gtagttgttc ttataaatta gtatctgtgg 1100
 aacacaatcc tttatatatc aacatcacag tggatttctg gtttggtgca 1150
 tgacctgga tcttttgggt atgtttggaa gaactgattc tttgtttgca 1200
 ataattttgg cctagagact tcaaatagta gcacacatta agaacctgtt 1250
 acagctcatt gttgagctga atttttcctt tttgtatttt cttagcagag 1300
 ctctgggtga tgtagagtat aaaacagttg taacaagaca gctttcttag 1350
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 ttatataaaa ggatgactca aaggataaaa tgaacgctat ttgaggactc 1450
 tggttgaagg agatttattt aaatttgaag taatatatta tgggataaaa 1500
 ggccacagga aataagactg ctgaatgtct gagagaacca gagttgttct 1550

cgtccaaggt agaaaggtac gaagatacaa tactgttatt catttatacct 1600
 gtacaatcat ctgtgaagtg gtggtgtcag gtgagaaggc gtccacaaaa 1650
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 cagtgatgcc caccagagaa tacattctct attagttttt aaagagtttt 1850
 tgtaaaatga ttttgtacaa gtaggatatg aattagcagt ttacaagttt 1900
 acatatatac taataataaa tatgtctatc aaatacctct gtagtaaaat 1950
 gtgaaaaagc aaaa 1964

<210> 42
 <211> 344
 <212> PRT
 <213> Homo Sapien

<400> 42
 Met Gly Phe Asn Leu Thr Phe His Leu Ser Tyr Lys Phe Arg Leu
 1 5 10 15
 Leu Leu Leu Leu Thr Leu Cys Leu Thr Val Val Gly Trp Ala Thr
 20 25 30
 Ser Asn Tyr Phe Val Gly Ala Ile Gln Glu Ile Pro Lys Ala Lys
 35 40 45
 Glu Phe Met Ala Asn Phe His Lys Thr Leu Ile Leu Gly Lys Gly
 50 55 60
 Lys Thr Leu Thr Asn Glu Ala Ser Thr Lys Lys Val Glu Leu Asp
 65 70 75
 Asn Cys Pro Ser Val Ser Pro Tyr Leu Arg Gly Gln Ser Lys Leu
 80 85 90
 Ile Phe Lys Pro Asp Leu Thr Leu Glu Glu Val Gln Ala Glu Asn
 95 100 105
 Pro Lys Val Ser Arg Gly Arg Tyr Arg Pro Gln Glu Cys Lys Ala
 110 115 120
 Leu Gln Arg Val Ala Ile Leu Val Pro His Arg Asn Arg Glu Lys
 125 130 135
 His Leu Met Tyr Leu Leu Glu His Leu His Pro Phe Leu Gln Arg
 140 145 150
 Gln Gln Leu Asp Tyr Gly Ile Tyr Val Ile His Gln Ala Glu Gly
 155 160 165

Lys	Lys	Phe	Asn	Arg	Ala	Lys	Leu	Leu	Asn	Val	Gly	Tyr	Leu	Glu	
			170						175					180	
Ala	Leu	Lys	Glu	Glu	Asn	Trp	Asp	Cys	Phe	Ile	Phe	His	Asp	Val	
			185						190					195	
Asp	Leu	Val	Pro	Glu	Asn	Asp	Phe	Asn	Leu	Tyr	Lys	Cys	Glu	Glu	
			200						205					210	
His	Pro	Lys	His	Leu	Val	Val	Gly	Arg	Asn	Ser	Thr	Gly	Tyr	Arg	
			215						220					225	
Leu	Arg	Tyr	Ser	Gly	Tyr	Phe	Gly	Gly	Val	Thr	Ala	Leu	Ser	Arg	
			230						235					240	
Glu	Gln	Phe	Phe	Lys	Val	Asn	Gly	Phe	Ser	Asn	Asn	Tyr	Trp	Gly	
			245						250					255	
Trp	Gly	Gly	Glu	Asp	Asp	Asp	Leu	Arg	Leu	Arg	Val	Glu	Leu	Gln	
			260						265					270	
Arg	Met	Lys	Ile	Ser	Arg	Pro	Leu	Pro	Glu	Val	Gly	Lys	Tyr	Thr	
			275						280					285	
Met	Val	Phe	His	Thr	Arg	Asp	Lys	Gly	Asn	Glu	Val	Asn	Ala	Glu	
			290						295					300	
Arg	Met	Lys	Leu	Leu	His	Gln	Val	Ser	Arg	Val	Trp	Arg	Thr	Asp	
			305						310					315	
Gly	Leu	Ser	Ser	Cys	Ser	Tyr	Lys	Leu	Val	Ser	Val	Glu	His	Asn	
			320						325					330	
Pro	Leu	Tyr	Ile	Asn	Ile	Thr	Val	Asp	Phe	Trp	Phe	Gly	Ala		
			335						340						

<210> 43
 <211> 485
 <212> DNA
 <213> Homo Sapien

<400> 43
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 ctgaccagtg gctctgtttt cccacaacag acgggacaac ttgcagagct 150
 gcaacccag gagagagctg gagccagggc cagctggatg cccatgttcc 200
 agaggcgaag gaggcgagac acccacttcc ccatctgcat tttctgctgc 250
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 acctgccctg cccccgtccc ctcccttccct tatttattcc tgctgcccc 350
 gaacataggt cttggaataa aatggctggg tcttttggtt tccaaaaaaa 400

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 450

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 485

<210> 44

<211> 84

<212> PRT

<213> Homo Sapien

<400> 44

Met Ala Leu Ser Ser Gln Ile Trp Ala Ala Cys Leu Leu Leu Leu
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Leu Leu Leu Ala Ser Leu Thr Ser Gly Ser Val Phe Pro Gln Gln
20 25 30

Thr Gly Gln Leu Ala Glu Leu Gln Pro Gln Asp Arg Ala Gly Ala
35 40 45

Arg Ala Ser Trp Met Pro Met Phe Gln Arg Arg Arg Arg Arg Asp
50 55 60

Thr His Phe Pro Ile Cys Ile Phe Cys Cys Gly Cys Cys His Arg
65 70 75

Ser Lys Cys Gly Met Cys Cys Lys Thr
80

<210> 45

<211> 1076

<212> DNA

<213> Homo Sapien

<400> 45

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caacatgcct caccctcatc tatatccttt ggcagctcac agggtcagca 100

gcctctggac ccgtgaaaga gctggtcggt tccgttggtg gggccgtgac 150

tttccccctg aagtccaaag taaagcaagt tgactctatt gtctggacct 200

tcaacacaac cctcttctgtc accatacagc cagaaggggg cactatcata 250

gtgacccaaa atcgtaatag ggagagagta gacttcccag atggaggcta 300

ctccctgaag ctgagcaaac tgaagaagaa tgactcaggg atctactatg 350

tggggatata cagctcatca ctccagcagc cctccacca ggagtacgtg 400

ctgcatgtct acgagcacct gtcaaagcct aaagtcacca tgggtctgca 450

gagcaataag aatggcacct gtgtgaccaa tctgacatgc tgcattggaac 500

atggggaaga ggatgtgatt tatacctgga aggccctggg gcaagcagcc 550

aatgagtccc ataatgggtc catcctcccc atctcctgga gatggggaga 600
 aagtgatatg accttcatct gcgttgccag gaaccctgtc agcagaaact 650
 tctcaagccc catccttgcc aggaagctct gtgaagggtc tgctgatgac 700
 ccagattcct ccatggctct cctgtgtctc ctggttggtc cctcctgct 750
 cagtctcttt gtactggggc tatttctttg gtttctgaag agagagagac 800
 aagaagagta cattgaagag aagaagagag tggacatttg tcgggaaact 850
 cctaacatat gccccattc tggagagaac acagagtacg acacaatccc 900
 tcacactaat agaacaatcc taaaggaaga tccagcaaact acggtttact 950
 ccactgtgga aataccgaaa aagatggaaa atccccactc actgctcacg 1000
 atgccagaca caccaaggct attgcctat gagaatgtta tctagacagc 1050
 agtgcactcc cctaagtctc tgctca 1076

<210> 46
 <211> 335
 <212> PRT
 <213> Homo Sapien

<400> 46
 Met Ala Gly Ser Pro Thr Cys Leu Thr Leu Ile Tyr Ile Leu Trp
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 Gln Leu Thr Gly Ser Ala Ala Ser Gly Pro Val Lys Glu Leu Val
 20 25 30
 Gly Ser Val Gly Gly Ala Val Thr Phe Pro Leu Lys Ser Lys Val
 35 40 45
 Lys Gln Val Asp Ser Ile Val Trp Thr Phe Asn Thr Thr Pro Leu
 50 55 60
 Val Thr Ile Gln Pro Glu Gly Gly Thr Ile Ile Val Thr Gln Asn
 65 70 75
 Arg Asn Arg Glu Arg Val Asp Phe Pro Asp Gly Gly Tyr Ser Leu
 80 85 90
 Lys Leu Ser Lys Leu Lys Lys Asn Asp Ser Gly Ile Tyr Tyr Val
 95 100 105
 Gly Ile Tyr Ser Ser Ser Leu Gln Gln Pro Ser Thr Gln Glu Tyr
 110 115 120
 Val Leu His Val Tyr Glu His Leu Ser Lys Pro Lys Val Thr Met
 125 130 135
 Gly Leu Gln Ser Asn Lys Asn Gly Thr Cys Val Thr Asn Leu Thr
 140 145 150

Cys	Cys	Met	Glu	His	Gly	Glu	Glu	Asp	Val	Ile	Tyr	Thr	Trp	Lys
				155					160					165
Ala	Leu	Gly	Gln	Ala	Ala	Asn	Glu	Ser	His	Asn	Gly	Ser	Ile	Leu
				170					175					180
Pro	Ile	Ser	Trp	Arg	Trp	Gly	Glu	Ser	Asp	Met	Thr	Phe	Ile	Cys
				185					190					195
Val	Ala	Arg	Asn	Pro	Val	Ser	Arg	Asn	Phe	Ser	Ser	Pro	Ile	Leu
				200					205					210
Ala	Arg	Lys	Leu	Cys	Glu	Gly	Ala	Ala	Asp	Asp	Pro	Asp	Ser	Ser
				215					220					225
Met	Val	Leu	Leu	Cys	Leu	Leu	Leu	Val	Pro	Leu	Leu	Leu	Ser	Leu
				230					235					240
Phe	Val	Leu	Gly	Leu	Phe	Leu	Trp	Phe	Leu	Lys	Arg	Glu	Arg	Gln
				245					250					255
Glu	Glu	Tyr	Ile	Glu	Glu	Lys	Lys	Arg	Val	Asp	Ile	Cys	Arg	Glu
				260					265					270
Thr	Pro	Asn	Ile	Cys	Pro	His	Ser	Gly	Glu	Asn	Thr	Glu	Tyr	Asp
				275					280					285
Thr	Ile	Pro	His	Thr	Asn	Arg	Thr	Ile	Leu	Lys	Glu	Asp	Pro	Ala
				290					295					300
Asn	Thr	Val	Tyr	Ser	Thr	Val	Glu	Ile	Pro	Lys	Lys	Met	Glu	Asn
				305					310					315
Pro	His	Ser	Leu	Leu	Thr	Met	Pro	Asp	Thr	Pro	Arg	Leu	Phe	Ala
				320					325					330
Tyr	Glu	Asn	Val	Ile										
				335										

<210> 47

<211> 766

<212> DNA

<213> Homo Sapien

<400> 47

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ttctcaatgc gatacctcta attgtcagct tagttgagga agaccaattt 150
tctcaaaacc ccatctcttg ctttgagtgg tggttcccag gaattatagg 200
agcaggtctg atggccattc cagcaacaac aatgtccttg acagcaagaa 250
aaagagcgtg ctgcaacaac agaactggaa tgtttctttc atcatttttc 300

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agtgtgatca cagtcattgg tgctctgtat tgcattgctga tatccatcca 350
 ggctctctta aaaggctctc tcatgtgtaa ttctccaagc aacagtaatg 400
 ccaattgtga attttcattg aaaaacatca gtgacattca tccagaatcc 450
 ttcaacttgc agtgggtttt caatgactct tgtgcacctc ctactgggtt 500
 caataaaccc accagtaacg acaccatggc gagtggctgg agagcatcta 550
 gtttccactt cgattctgaa gaaaacaaac ataggcttat ccacttctca 600
 gtatttttag gtctattgct tggttgaatt ctggagggtcc tgtttgggct 650
 cagtcagata gtcacgggtt tccttggctg tctgtgtgga gtctctaagc 700
 gaagaagtca aattgtgtag tttaatggga ataaaatgta agtatcagta 750
 gtttgaaaaa aaaaaa 766

<210> 48
 <211> 229
 <212> PRT
 <213> Homo Sapien

<400> 48
 Met Thr Cys Cys Glu Gly Trp Thr Ser Cys Asn Gly Phe Ser Leu
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 Leu Val Leu Leu Leu Leu Gly Val Val Leu Asn Ala Ile Pro Leu
 20 25 30
 Ile Val Ser Leu Val Glu Glu Asp Gln Phe Ser Gln Asn Pro Ile
 35 40 45
 Ser Cys Phe Glu Trp Trp Phe Pro Gly Ile Ile Gly Ala Gly Leu
 50 55 60
 Met Ala Ile Pro Ala Thr Thr Met Ser Leu Thr Ala Arg Lys Arg
 65 70 75
 Ala Cys Cys Asn Asn Arg Thr Gly Met Phe Leu Ser Ser Phe Phe
 80 85 90
 Ser Val Ile Thr Val Ile Gly Ala Leu Tyr Cys Met Leu Ile Ser
 95 100 105
 Ile Gln Ala Leu Leu Lys Gly Pro Leu Met Cys Asn Ser Pro Ser
 110 115 120
 Asn Ser Asn Ala Asn Cys Glu Phe Ser Leu Lys Asn Ile Ser Asp
 125 130 135
 Ile His Pro Glu Ser Phe Asn Leu Gln Trp Phe Phe Asn Asp Ser
 140 145 150
 Cys Ala Pro Pro Thr Gly Phe Asn Lys Pro Thr Ser Asn Asp Thr

	155		160		165									
Met	Ala	Ser	Gly	Trp	Arg	Ala	Ser	Ser	Phe	His	Phe	Asp	Ser	Glu
			170						175					180
Glu	Asn	Lys	His	Arg	Leu	Ile	His	Phe	Ser	Val	Phe	Leu	Gly	Leu
			185						190					195
Leu	Leu	Val	Gly	Ile	Leu	Glu	Val	Leu	Phe	Gly	Leu	Ser	Gln	Ile
			200						205					210
Val	Ile	Gly	Phe	Leu	Gly	Cys	Leu	Cys	Gly	Val	Ser	Lys	Arg	Arg
			215						220					225

Ser Gln Ile Val

<210> 49
 <211> 636
 <212> DNA
 <213> Homo Sapien

<400> 49
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 ctgaccaatt gagctgtgag cctggagcag atccgtgggc tgcagacccc 150
 cgccccagtg cctctcccc tgcagccctg cccctcgaac tgtgacatgg 200
 agagagtgac cctggccctt ctctactgg caggcctgac tgccttgga 250
 gccaatgacc catttgccaa taaagacgat cccttctact atgactggaa 300
 aaacctgcag ctgagcggac tgatctgcgg agggctcctg gccattgctg 350
 ggatcgcggc agttctgagt ggcaaagca aatacaagag cagccagaag 400
 cagcacagtc ctgtacctga gaaggccatc ccaatcatca ctccaggctc 450
 tgccactact tgctgagcac aggactggcc tccagggatg gcctgaagcc 500
 taacactggc cccagcacc tcctccctg ggaggcctta tcctcaagga 550
 aggacttctc tccaaggga ggctgttagg cccctttctg atcaggaggc 600
 ttctttatga attaaactg cccaccacc ccctca 636

<210> 50
 <211> 89
 <212> PRT
 <213> Homo Sapien

<400> 50
 Met Glu Arg Val Thr Leu Ala Leu Leu Leu Leu Ala Gly Leu Thr
 1 5 10 15

Ala	Leu	Glu	Ala	Asn	Asp	Pro	Phe	Ala	Asn	Lys	Asp	Asp	Pro	Phe
				20					25					30
Tyr	Tyr	Asp	Trp	Lys	Asn	Leu	Gln	Leu	Ser	Gly	Leu	Ile	Cys	Gly
				35					40					45
Gly	Leu	Leu	Ala	Ile	Ala	Gly	Ile	Ala	Ala	Val	Leu	Ser	Gly	Lys
				50					55					60
Cys	Lys	Tyr	Lys	Ser	Ser	Gln	Lys	Gln	His	Ser	Pro	Val	Pro	Glu
				65					70					75
Lys	Ala	Ile	Pro	Leu	Ile	Thr	Pro	Gly	Ser	Ala	Thr	Thr	Cys	
				80					85					

<210> 51
 <211> 1734
 <212> DNA
 <213> Homo Sapien

<400> 51
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 gcacagagac gcagagcaag ggcggcaagg aggagaccct ggtgggagga 150
 agacactctg gagagagagg gggctgggca gagatgaagt tccaggggcc 200
 cctggcctgc ctctgctgg ccctctgcct gggcagtgagg gaggctggcc 250
 ccctgcagag cggagaggaa agcactggga caaatattgg ggaggccctt 300
 ggacatggcc tgggagacgc cctgagcgaa ggggtgggaa aggccattgg 350
 caaagaggcc ggaggggagc ctggctctaa agtcagttag gcccttggcc 400
 aagggaccag agaagcagtt ggcactggag tcaggcaggt tccaggcttt 450
 ggcgcagcag atgctttggg caacagggtc ggggaagcag cccatgctct 500
 gggaaacact gggcacgaga ttggcagaca ggcagaagat gtcattcgac 550
 acggagcaga tgctgtccgc ggctcctggc agggggtgcc tggccacagt 600
 ggtgcttggg aaacttctgg aggccatggc atctttggct ctcaaggtgg 650
 ccttgagggc cagggccagg gcaatcctgg aggtctgggg actccgtggg 700
 tccacggata ccccggaac tcagcaggca gctttggaat gaatcctcag 750
 ggagctccct ggggtcaagg aggcaatgga gggccaccaa actttgggac 800
 caacactcag ggagctgtgg cccagcctgg ctatggttca gtgagagcca 850
 gcaaccagaa tgaagggtgc acgaatcccc caccatctgg ctcaagtgga 900

ggctccagca actctggggg aggcagcggc tcacagtcgg gcagcagtgg 950
 cagtggcagc aatggtgaca acaacaatgg cagcagcagt ggtggcagca 1000
 gcagtggcag cagcagtggc agcagcagtg gcggcagcag tggcggcagc 1050
 agtgggtggca gcagtggcaa cagtgggtggc agcagaggtg acagcggcag 1100
 tgagtccctcc tggggatcca gcaccggctc ctctccggc aaccacggtg 1150
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 gaagcccgcg ggagcgggga atctgggatt cagggcttca gaggacaggg 1250
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 ccgtgacctc cagacaagga gccaccagat tggatgggag cccccacact 1550
 ccctccttaa aacaccaccc tctcatcact aatctcagcc cttgcccttg 1600
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1700
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1734

<210> 52
 <211> 440
 <212> PRT
 <213> Homo Sapien

<400> 52
 Met Lys Phe Gln Gly Pro Leu Ala Cys Leu Leu Leu Ala Leu Cys
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 Leu Gly Ser Gly Glu Ala Gly Pro Leu Gln Ser Gly Glu Glu Ser
 20 25 30
 Thr Gly Thr Asn Ile Gly Glu Ala Leu Gly His Gly Leu Gly Asp
 35 40 45
 Ala Leu Ser Glu Gly Val Gly Lys Ala Ile Gly Lys Glu Ala Gly
 50 55 60
 Gly Ala Ala Gly Ser Lys Val Ser Glu Ala Leu Gly Gln Gly Thr
 65 70 75
 Arg Glu Ala Val Gly Thr Gly Val Arg Gln Val Pro Gly Phe Gly
 80 85 90

Ala	Ala	Asp	Ala	Leu	Gly	Asn	Arg	Val	Gly	Glu	Ala	Ala	His	Ala		95	100	105
Leu	Gly	Asn	Thr	Gly	His	Glu	Ile	Gly	Arg	Gln	Ala	Glu	Asp	Val		110	115	120
Ile	Arg	His	Gly	Ala	Asp	Ala	Val	Arg	Gly	Ser	Trp	Gln	Gly	Val		125	130	135
Pro	Gly	His	Ser	Gly	Ala	Trp	Glu	Thr	Ser	Gly	Gly	His	Gly	Ile		140	145	150
Phe	Gly	Ser	Gln	Gly	Gly	Leu	Gly	Gly	Gln	Gly	Gln	Gly	Asn	Pro		155	160	165
Gly	Gly	Leu	Gly	Thr	Pro	Trp	Val	His	Gly	Tyr	Pro	Gly	Asn	Ser		170	175	180
Ala	Gly	Ser	Phe	Gly	Met	Asn	Pro	Gln	Gly	Ala	Pro	Trp	Gly	Gln		185	190	195
Gly	Gly	Asn	Gly	Gly	Pro	Pro	Asn	Phe	Gly	Thr	Asn	Thr	Gln	Gly		200	205	210
Ala	Val	Ala	Gln	Pro	Gly	Tyr	Gly	Ser	Val	Arg	Ala	Ser	Asn	Gln		215	220	225
Asn	Glu	Gly	Cys	Thr	Asn	Pro	Pro	Pro	Ser	Gly	Ser	Gly	Gly	Gly		230	235	240
Ser	Ser	Asn	Ser	Gly	Gly	Gly	Ser	Gly	Ser	Gln	Ser	Gly	Ser	Ser		245	250	255
Gly	Ser	Gly	Ser	Asn	Gly	Asp	Asn	Asn	Asn	Gly	Ser	Ser	Ser	Gly		260	265	270
Gly	Ser	Ser	Ser	Gly	Ser	Ser	Ser	Gly	Ser	Ser	Ser	Gly	Gly	Ser		275	280	285
Ser	Gly	Gly	Ser	Ser	Gly	Gly	Ser	Ser	Gly	Asn	Ser	Gly	Gly	Ser		290	295	300
Arg	Gly	Asp	Ser	Gly	Ser	Glu	Ser	Ser	Trp	Gly	Ser	Ser	Thr	Gly		305	310	315
Ser	Ser	Ser	Gly	Asn	His	Gly	Gly	Ser	Gly	Gly	Gly	Asn	Gly	His		320	325	330
Lys	Pro	Gly	Cys	Glu	Lys	Pro	Gly	Asn	Glu	Ala	Arg	Gly	Ser	Gly		335	340	345
Glu	Ser	Gly	Ile	Gln	Gly	Phe	Arg	Gly	Gln	Gly	Val	Ser	Ser	Asn		350	355	360
Met	Arg	Glu	Ile	Ser	Lys	Glu	Gly	Asn	Arg	Leu	Leu	Gly	Gly	Ser		365	370	375

Gly	Asp	Asn	Tyr	Arg	Gly	Gln	Gly	Ser	Ser	Trp	Gly	Ser	Gly	Gly
				380					385					390
Gly	Asp	Ala	Val	Gly	Gly	Val	Asn	Thr	Val	Asn	Ser	Glu	Thr	Ser
				395					400					405
Pro	Gly	Met	Phe	Asn	Phe	Asp	Thr	Phe	Trp	Lys	Asn	Phe	Lys	Ser
				410					415					420
Lys	Leu	Gly	Phe	Ile	Asn	Trp	Asp	Ala	Ile	Asn	Lys	Asp	Gln	Arg
				425					430					435
Ser	Ser	Arg	Ile	Pro										
				440										

<210> 53
 <211> 1676
 <212> DNA
 <213> Homo Sapien

<400> 53
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 actcctgctg ctggttgtgg gctcctgget actcgccgc atcctggctt 150
 ggacctatgc cttctataac aactgccgcc ggctccagtg tttccacag 200
 cccccaaac ggaactggtt ttggggtcac ctgggcctga tctctctac 250
 agaggagggc ttgaaggact cgaccagat gtcggccacc tattccagg 300
 gctttacggt atggctgggt cccatcatcc ccttcacgt tttatgccac 350
 cctgacacca tccggtctat caccaatgcc tcagctgcca ttgcaccaa 400
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 <212> PRT
 <213> Homo Sapien

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 Arg Arg Leu Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn Trp Phe
 50 55 60
 Trp Gly His Leu Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu Lys
 65 70 75
 Asp Ser Thr Gln Met Ser Ala Thr Tyr Ser Gln Gly Phe Thr Val
 80 85 90
 Trp Leu Gly Pro Ile Ile Pro Phe Ile Val Leu Cys His Pro Asp
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Leu	Thr	Pro	Ala	Phe	His	Phe	Asn	Ile	Leu	Lys	Ser	Tyr	Ile	Thr	
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				185					190					195	
Ser	Leu	Met	Thr	Leu	Asp	Ser	Leu	Gln	Lys	Cys	Ile	Phe	Ser	Phe	
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Asp	Ser	His	Cys	Gln	Glu	Arg	Pro	Ser	Glu	Tyr	Ile	Ala	Thr	Ile	
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Ala	Gln	Leu	Pro	Phe	Leu	Thr	Met	Cys	Val	Lys	Glu	Ser	Leu	Arg	
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Asp	Pro	Glu	Val	Tyr	Asp	Pro	Phe	Arg	Phe	Asp	Pro	Glu	Asn	Ser	
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Lys	Gly	Arg	Ser	Pro	Leu	Ala	Phe	Ile	Pro	Phe	Ser	Ala	Gly	Pro	
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Arg	Asn	Cys	Ile	Gly	Gln	Ala	Phe	Ala	Met	Ala	Glu	Met	Lys	Val	
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Val	Leu	Ala	Leu	Met	Leu	Leu	His	Phe	Arg	Phe	Leu	Pro	Asp	His	
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Thr	Glu	Pro	Arg	Arg	Lys	Leu	Glu	Leu	Ile	Met	Arg	Ala	Glu	Gly	
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<210> 55

<211> 644

<212> DNA

<213> Homo Sapien

<400> 55

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<210> 56

<211> 77

<212> PRT

<213> Homo Sapien

<400> 56

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				20					25					30

Cys	Ser	Ala	Phe	Trp	Trp	His	Asn	Lys	Gly	Leu	Ala	Leu	Ile	Phe
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Cys	Ile	Leu	Gln	Ser	Leu	Ala	Leu	Thr	Trp	Tyr	Ser	Leu	Ser	Phe
				50					55					60

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<210> 57

<211> 3334

<212> DNA

<213> Homo Sapien

<400> 57

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<210> 58

<211> 469

<212> PRT

<213> Homo Sapien

<400> 58

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Leu Gln Asp His Glu	Lys Lys Leu Arg	Leu Val Phe Lys Ile	Leu
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Asp Lys Lys Asn Asp	Gly Arg Ile Asp	Ala Gln Glu Ile Met	Gln
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Ser Leu Arg Asp Leu	Gly Val Lys Ile	Ser Glu Gln Gln Ala	Glu
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Lys Ile Leu Lys Ser	Met Asp Lys Asn	Gly Thr Met Thr Ile	Asp
125		130	135
Trp Asn Glu Trp Arg	Asp Tyr His Leu	Leu His Pro Val Glu	Asn
140		145	150
Ile Pro Glu Ile Ile	Leu Tyr Trp Lys	His Ser Thr Ile Phe	Asp
155		160	165
Val Gly Glu Asn Leu	Thr Val Pro Asp	Glu Phe Thr Val Glu	Glu
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Arg Gln Thr Gly Met	Trp Trp Arg His	Leu Val Ala Gly Gly	Gly
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Ala Gly Ala Val Ser	Arg Thr Cys Thr	Ala Pro Leu Asp Arg	Leu
200		205	210
Lys Val Leu Met Gln	Val His Ala Ser	Arg Ser Asn Asn Met	Gly
215		220	225
Ile Val Gly Gly Phe	Thr Gln Met Ile	Arg Glu Gly Gly Ala	Arg
230		235	240
Ser Leu Trp Arg Gly	Asn Gly Ile Asn	Val Leu Lys Ile Ala	Pro
245		250	255
Glu Ser Ala Ile Lys	Phe Met Ala Tyr	Glu Gln Ile Lys Arg	Leu
260		265	270
Val Gly Ser Asp Gln	Glu Thr Leu Arg	Ile His Glu Arg Leu	Val
275		280	285
Ala Gly Ser Leu Ala	Gly Ala Ile Ala	Gln Ser Ser Ile Tyr	Pro

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Tyr	Ser	Gly	Met	Leu	Asp	Cys	Ala	Arg	Arg	Ile	Leu	Ala	Arg	Glu
				320					325					330
Gly	Val	Ala	Ala	Phe	Tyr	Lys	Gly	Tyr	Val	Pro	Asn	Met	Leu	Gly
				335					340					345
Ile	Ile	Pro	Tyr	Ala	Gly	Ile	Asp	Leu	Ala	Val	Tyr	Glu	Thr	Leu
				350					355					360
Lys	Asn	Ala	Trp	Leu	Gln	His	Tyr	Ala	Val	Asn	Ser	Ala	Asp	Pro
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Gly	Val	Phe	Val	Leu	Leu	Ala	Cys	Gly	Thr	Met	Ser	Ser	Thr	Cys
				380					385					390
Gly	Gln	Leu	Ala	Ser	Tyr	Pro	Leu	Ala	Leu	Val	Arg	Thr	Arg	Met
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Gln	Ala	Gln	Ala	Ser	Ile	Glu	Gly	Ala	Pro	Glu	Val	Thr	Met	Ser
				410					415					420
Ser	Leu	Phe	Lys	His	Ile	Leu	Arg	Thr	Glu	Gly	Ala	Phe	Gly	Leu
				425					430					435
Tyr	Arg	Gly	Leu	Ala	Pro	Asn	Phe	Met	Lys	Val	Ile	Pro	Ala	Val
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Ser	Ile	Ser	Tyr	Val	Val	Tyr	Glu	Asn	Leu	Lys	Ile	Thr	Leu	Gly
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Val Gln Ser Arg

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 <211> 1658
 <212> DNA
 <213> Homo Sapien

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<211> 282

<212> PRT

<213> Homo Sapien

<400> 60

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				20					25					30	
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Asp	Ile	Lys	Leu	Ser	Asp	Ile	Val	Ile	Gln	Trp	Leu	Lys	Glu	Gly	
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Val	Leu	Gly	Leu	Val	His	Glu	Phe	Lys	Glu	Gly	Lys	Asp	Glu	Leu	
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Gln	Leu	Thr	Asp	Ala	Gly	Thr	Tyr	Lys	Cys	Tyr	Ile	Ile	Thr	Ser	
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Trp	Ala	Ser	Gln	Val	Asp	Gln	Gly	Ala	Asn	Phe	Ser	Glu	Val	Ser	
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Asn	Thr	Ser	Phe	Glu	Leu	Asn	Ser	Glu	Asn	Val	Thr	Met	Lys	Val	
				200					205					210	
Val	Ser	Val	Leu	Tyr	Asn	Val	Thr	Ile	Asn	Asn	Thr	Tyr	Ser	Cys	
				215					220					225	
Met	Ile	Glu	Asn	Asp	Ile	Ala	Lys	Ala	Thr	Gly	Asp	Ile	Lys	Val	
				230					235					240	
Thr	Glu	Ser	Glu	Ile	Lys	Arg	Arg	Ser	His	Leu	Gln	Leu	Leu	Asn	
				245					250					255	
Ser	Lys	Ala	Ser	Leu	Cys	Val	Ser	Ser	Phe	Phe	Ala	Ile	Ser	Trp	
				260					265					270	

Ala Leu Leu Pro Leu Ser Pro Tyr Leu Met Leu Lys
 275 280

<210> 61
 <211> 1617
 <212> DNA
 <213> Homo Sapien

<400> 61
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 ccccccaata gtggagggca gtatggtagt gggctacccc ctgggtgggtgg 150
 ttatgggggt cctgcccctg gagggcctta tggaccacca gctgggtggag 200
 ggccctatgg acaccccaat cctgggatgt tcccctctgg aactccagga 250
 ggaccatatg gcggtgcagc tcccgggggc ccctatggtc agccacctcc 300
 aagtctctac ggtgcccagc agcctgggct ttatggacag ggtggcgccc 350
 ctcccaatgt ggatcctgag gctactcct ggttccagtc ggtggactca 400
 gatcacagtg gctatatctc catgaaggag ctaaagcagg ccctgggtcaa 450
 ctgcaattgg tcttcattca atgatgagac ctgcctcatg atgataaaca 500
 tgtttgacaa gaccaagtca ggccgcatcg atgtctacgg cttctcagcc 550
 ctgtggaaat tcatccagca gtggaagaac ctcttccagc agtatgaccg 600
 ggaccgctcg ggctccatta gctacacaga gctgcagcaa gctctgtccc 650
 aaatgggcta caacctgagc cccagttca cccagcttct ggtctcccgc 700
 tactgcccac gctctgccaa tctgccatg cagcttgacc gcttcatcca 750
 ggtgtgcacc cagctgcagg tgctgacaga ggccttccgg gagaaggaca 800
 cagctgtaca aggcaacatc cggctcagct tcgaggactt cgtcaccatg 850
 acagcttctc ggatgctatg acccaaccat ctgtggagag tggagtgcac 900
 cagggacctt tcttggttc ttagagtgag agaagtatgt ggacatctct 950
 tcttttctg tccctctaga agaacattct cccttgcttg atgcaacact 1000
 gttccaaaag aggggtggaga gtctgcatc atagccacca aatagtgagg 1050
 accggggctg aggcacaca gataggggcc tgatggagga gaggatagaa 1100
 gttgaatgtc ctgatggcca tgagcagttg agtggcacag cctggcacca 1150
 ggagcaggtc cttgtaatgg agttagtgtc cagtcagctg agctccaccc 1200

tgatgccagt ggtgagtgtt catcggcctg ttaccgttag tacctgtgtt 1250
 ccctcaccag gccatcctgt caaacgagcc cattttctcc aaagtggaat 1300
 ctgaccaagc atgagagaga tctgtctatg ggaccagtgg cttggattct 1350
 gccacaccca taaatccttg tgtgttaact tctagctgcc tggggctggc 1400
 cctgctcaga caaatctgct ccctgggcat ctttggccag gcttctgccc 1450
 cctgcagctg ggacccctca cttgcctgcc atgctctgct cggcttcagt 1500
 ctccaggaga cagtggtcac ctctccctgc caatactttt tttaatttgc 1550
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 aaagatgaa actctga 1617

<210> 62

<211> 284

<212> PRT

<213> Homo Sapien

<400> 62

Met	Ala	Ser	Tyr	Pro	Tyr	Arg	Gln	Gly	Cys	Pro	Gly	Ala	Ala	Gly
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Gln	Ala	Pro	Gly	Ala	Pro	Pro	Gly	Ser	Tyr	Tyr	Pro	Gly	Pro	Pro
				20					25					30
Asn	Ser	Gly	Gly	Gln	Tyr	Gly	Ser	Gly	Leu	Pro	Pro	Gly	Gly	Gly
				35					40					45
Tyr	Gly	Gly	Pro	Ala	Pro	Gly	Gly	Pro	Tyr	Gly	Pro	Pro	Ala	Gly
				50					55					60
Gly	Gly	Pro	Tyr	Gly	His	Pro	Asn	Pro	Gly	Met	Phe	Pro	Ser	Gly
				65					70					75
Thr	Pro	Gly	Gly	Pro	Tyr	Gly	Gly	Ala	Ala	Pro	Gly	Gly	Pro	Tyr
				80					85					90
Gly	Gln	Pro	Pro	Pro	Ser	Ser	Tyr	Gly	Ala	Gln	Gln	Pro	Gly	Leu
				95					100					105
Tyr	Gly	Gln	Gly	Gly	Ala	Pro	Pro	Asn	Val	Asp	Pro	Glu	Ala	Tyr
				110					115					120
Ser	Trp	Phe	Gln	Ser	Val	Asp	Ser	Asp	His	Ser	Gly	Tyr	Ile	Ser
				125					130					135
Met	Lys	Glu	Leu	Lys	Gln	Ala	Leu	Val	Asn	Cys	Asn	Trp	Ser	Ser
				140					145					150
Phe	Asn	Asp	Glu	Thr	Cys	Leu	Met	Met	Ile	Asn	Met	Phe	Asp	Lys
				155					160					165

Thr	Lys	Ser	Gly	Arg	Ile	Asp	Val	Tyr	Gly	Phe	Ser	Ala	Leu	Trp
				170					175					180
Lys	Phe	Ile	Gln	Gln	Trp	Lys	Asn	Leu	Phe	Gln	Gln	Tyr	Asp	Arg
				185					190					195
Asp	Arg	Ser	Gly	Ser	Ile	Ser	Tyr	Thr	Glu	Leu	Gln	Gln	Ala	Leu
				200					205					210
Ser	Gln	Met	Gly	Tyr	Asn	Leu	Ser	Pro	Gln	Phe	Thr	Gln	Leu	Leu
				215					220					225
Val	Ser	Arg	Tyr	Cys	Pro	Arg	Ser	Ala	Asn	Pro	Ala	Met	Gln	Leu
				230					235					240
Asp	Arg	Phe	Ile	Gln	Val	Cys	Thr	Gln	Leu	Gln	Val	Leu	Thr	Glu
				245					250					255
Ala	Phe	Arg	Glu	Lys	Asp	Thr	Ala	Val	Gln	Gly	Asn	Ile	Arg	Leu
				260					265					270
Ser	Phe	Glu	Asp	Phe	Val	Thr	Met	Thr	Ala	Ser	Arg	Met	Leu	
				275					280					

<210> 63
 <211> 1234
 <212> DNA
 <213> Homo Sapien

<400> 63
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 tggctgtct tcatctccca ggctctttt cccggagcat cgggtgtgtg 100
 gaggagaaag tttcccaaaa cttcgggacc aacttgcttc agctcggaca 150

 accttctcc actggccct ctaactctga acatccgcag cccgctctgg 200

 accctaggtc taatgacttg gcaagggttc ctctgaagct cagcgtgcct 250

 ccatcagatg gcttcccacc tgcaggaggt tctgcagtgc agaggtggcc 300

 tccatcgtgg gggctgctg ccatggattc ctggccccct gaggatcctt 350

 ggcagatgat ggctgctgcg gctgaggacc gcctggggga agcgtgcct 400

 gaagaactct cttacctctc cagtgtgctg gccctcgctc cgggcagtgg 450

 ccctttgcct ggggagtctt ctcccgatgc cacaggcctc tcacctgagg 500

 cttcactcct ccaccaggac tcggagtcca gacgactgcc ccgttctaata 550

 tcaactggag cggggggaaa aatcctttcc caacgcctc cctgggtctct 600

 catccacagg gttctgctg atcaccctg gggtagcctg aatccagtg 650

 tgtcctgggg aggtggaggc cctgggactg gttggggaac gaggcccatg 700

ccacaccctg aggggaatctg gggatatcaat aatcaacccc caggtaccag 750
 ctggggaaat attaatcggt atccaggagg cagctgggga aatattaatc 800
 ggtatccagg aggcagctgg gggaatatta atcggtatcc aggaggcagc 850
 tgggggaata ttcattctata cccaggtatc aataacccat ttcctcctgg 900
 agttctccgc cctcctggct cttcttgga catcccagct ggcttcctta 950
 atcctccaag ccctaggttg cagtggggct agagcacgat agagggaaac 1000
 ccaacattgg gagttagagt cctgctcccg ccccttgctg tgtgggctca 1050
 atccaggccc tgtaacatg tttccagcac tatccccact tttcagtgcc 1100
 tcccctgctc atctccaata aaataaaagc acttatgaaa aaaaaaaaaa 1150
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1234

<210> 64
 <211> 325
 <212> PRT
 <213> Homo Sapien

<400> 64
 Met Gln Gly Arg Val Ala Gly Ser Cys Ala Pro Leu Gly Leu Leu
 1 5 10 15
 Leu Val Cys Leu His Leu Pro Gly Leu Phe Ala Arg Ser Ile Gly
 20 25 30
 Val Val Glu Glu Lys Val Ser Gln Asn Phe Gly Thr Asn Leu Pro
 35 40 45
 Gln Leu Gly Gln Pro Ser Ser Thr Gly Pro Ser Asn Ser Glu His
 50 55 60
 Pro Gln Pro Ala Leu Asp Pro Arg Ser Asn Asp Leu Ala Arg Val
 65 70 75
 Pro Leu Lys Leu Ser Val Pro Pro Ser Asp Gly Phe Pro Pro Ala
 80 85 90
 Gly Gly Ser Ala Val Gln Arg Trp Pro Pro Ser Trp Gly Leu Pro
 95 100 105
 Ala Met Asp Ser Trp Pro Pro Glu Asp Pro Trp Gln Met Met Ala
 110 115 120
 Ala Ala Ala Glu Asp Arg Leu Gly Glu Ala Leu Pro Glu Glu Leu
 125 130 135
 Ser Tyr Leu Ser Ser Ala Ala Ala Leu Ala Pro Gly Ser Gly Pro
 140 145 150

Leu	Pro	Gly	Glu	Ser	Ser	Pro	Asp	Ala	Thr	Gly	Leu	Ser	Pro	Glu	155	160	165
Ala	Ser	Leu	Leu	His	Gln	Asp	Ser	Glu	Ser	Arg	Arg	Leu	Pro	Arg	170	175	180
Ser	Asn	Ser	Leu	Gly	Ala	Gly	Gly	Lys	Ile	Leu	Ser	Gln	Arg	Pro	185	190	195
Pro	Trp	Ser	Leu	Ile	His	Arg	Val	Leu	Pro	Asp	His	Pro	Trp	Gly	200	205	210
Thr	Leu	Asn	Pro	Ser	Val	Ser	Trp	Gly	Gly	Gly	Gly	Pro	Gly	Thr	215	220	225
Gly	Trp	Gly	Thr	Arg	Pro	Met	Pro	His	Pro	Glu	Gly	Ile	Trp	Gly	230	235	240
Ile	Asn	Asn	Gln	Pro	Pro	Gly	Thr	Ser	Trp	Gly	Asn	Ile	Asn	Arg	245	250	255
Tyr	Pro	Gly	Gly	Ser	Trp	Gly	Asn	Ile	Asn	Arg	Tyr	Pro	Gly	Gly	260	265	270
Ser	Trp	Gly	Asn	Ile	Asn	Arg	Tyr	Pro	Gly	Gly	Ser	Trp	Gly	Asn	275	280	285
Ile	His	Leu	Tyr	Pro	Gly	Ile	Asn	Asn	Pro	Phe	Pro	Pro	Gly	Val	290	295	300
Leu	Arg	Pro	Pro	Gly	Ser	Ser	Trp	Asn	Ile	Pro	Ala	Gly	Phe	Pro	305	310	315
Asn	Pro	Pro	Ser	Pro	Arg	Leu	Gln	Trp	Gly						320	325	

<210> 65
 <211> 422
 <212> DNA
 <213> Homo Sapien

<400> 65
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 ggccactatg gggctctgggc tgccccttgt cctcctcttg accctccttg 100
 gcagctcaca tggaacaggg ccgggtatga ctttgcaact gaagctgaag 150
 gagtcttttc tgacaaattc ctctatgag tccagcttcc tggaattgct 200
 tgaaaagctc tgccctctcc tccatctccc ttcagggacc agcgtcaccc 250
 tccaccatgc aagatctcaa caccatgttg tctgcaacac atgacagcca 300
 ttgaagcctg tgtccttctt ggcccgggct tttgggccgg ggatgcagga 350
 ggcaggcccc gaccctgtct ttcagcaggc cccaccctc ctgagtggca 400

ataaataaaa ttcggtatgc tg 422

<210> 66

<211> 78

<212> PRT

<213> Homo Sapien

<400> 66

Met	Gly	Ser	Gly	Leu	Pro	Leu	Val	Leu	Leu	Leu	Thr	Leu	Leu	Gly
1				5				10						15
Ser	Ser	His	Gly	Thr	Gly	Pro	Gly	Met	Thr	Leu	Gln	Leu	Lys	Leu
				20				25						30
Lys	Glu	Ser	Phe	Leu	Thr	Asn	Ser	Ser	Tyr	Glu	Ser	Ser	Phe	Leu
				35				40						45
Glu	Leu	Leu	Glu	Lys	Leu	Cys	Leu	Leu	Leu	His	Leu	Pro	Ser	Gly
				50				55						60
Thr	Ser	Val	Thr	Leu	His	His	Ala	Arg	Ser	Gln	His	His	Val	Val
				65				70						75

Cys Asn Thr

<210> 67

<211> 744

<212> DNA

<213> Homo Sapien

<400> 67

acggaccgag ggttcgaggg agggacacgg accaggaacc tgagctaggt 50

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gccaccacgc ccatggcgaa ccccgggctg gggctgcttc tggcgctggg 200

cctgccgttc ctgctggccc gctggggccg agcctggggg caaatacaga 250

ccacttctgc aaatgagaat agcactgttt tgccttcata caccagctcc 300

agctccgatg gcaacctgcg tccggaagcc atcactgcta tcatcgtgg 350

cttctccctc ttggctgcct tgctcctggc tgtggggctg gcactggttg 400

tgcggaagct tcgggagaag cggcagacgg agggcaccta ccggcccagt 450

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caaggagacg gtgcagggtt gcctgcccac ctaggtcccc tctcctgcat 550

ctgtctccct tcattgctgt gtgaccttgg ggaaaggcag tgccctctct 600

gggcagtcag atccaccag tgcttaatag cagggaagaa ggtacttcaa 650

agactctgcc cctgagggtca agagaggatg gggctattca cttttatata 700

tttatataaa attagtagtg agatgtaaaa aaaaaaaaaa aaaa 744

<210> 68
<211> 123
<212> PRT
<213> Homo Sapien

<400> 68
Met Ala Asn Pro Gly Leu Gly Leu Leu Leu Ala Leu Gly Leu Pro
1 5 10 15
Phe Leu Leu Ala Arg Trp Gly Arg Ala Trp Gly Gln Ile Gln Thr
20 25 30
Thr Ser Ala Asn Glu Asn Ser Thr Val Leu Pro Ser Ser Thr Ser
35 40 45
Ser Ser Ser Asp Gly Asn Leu Arg Pro Glu Ala Ile Thr Ala Ile
50 55 60
Ile Val Val Phe Ser Leu Leu Ala Ala Leu Leu Leu Ala Val Gly
65 70 75
Leu Ala Leu Leu Val Arg Lys Leu Arg Glu Lys Arg Gln Thr Glu
80 85 90
Gly Thr Tyr Arg Pro Ser Ser Glu Glu Gln Phe Ser His Ala Ala
95 100 105
Glu Ala Arg Ala Pro Gln Asp Ser Lys Glu Thr Val Gln Gly Cys
110 115 120
Leu Pro Ile

<210> 69
<211> 3265
<212> DNA
<213> Homo Sapien

<400> 69
gccaggaata actagagagg aacaatgggg ttattcagag gttttgtttt 50
cctcttagtt ctgtgcctgc tgcaccagtc aaatacttcc ttcattaagc 100
tgaataataa tggctttgaa gatattgtca ttggtataga tcctagtgtg 150
ccagaagatg aaaaaataat tgaacaaata gaggatatgg tgactacagc 200
ttctacgtac ctgtttgaag ccacagaaaa aagatttttt ttcaaaaatg 250
tatctatatt aattcctgag aattggaagg aaaatcctca gtacaaaagg 300
ccaaaacatg aaaaccataa acatgctgat gttatagttg caccacctac 350

actcccaggt agagatgaac catacaccaa gcagttcaca gaatgtggag 400
 agaaaggcga atacattcac ttcacccctg accttctact tggaaaaaaa 450
 caaaatgaat atggaccacc aggcaaactg tttgtccatg agtggggtca 500
 cctccggtgg ggagtgtttg atgagtacaa tgaagatcag ctttctacc 550
 gtgctaagtc aaaaaaaatc gaagcaacaa ggtgttccgc aggtatctct 600
 ggtagaaata gagtttataa gtgtcaagga ggcagctgtc ttagtagagc 650
 atgcagaatt gattctacaa caaaactgta tggaaaagat tgtcaattct 700
 ttctgataa agtacaaaca gaaaaagcat ccataatgtt tatgcaaagt 750
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 tccaagccta caaaacataa agtgcaattt tagaagtaca tgggaggtga 850
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 tgggtgggga tgggttcactt tgatagtact gccactattg taaataagct 1100
 aatccaaata aaaagcagtg atgaaagaaa cacactcatg gcaggattac 1150
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 gctgctgact gatggggagg ataacactgc aagttcttgt attgatgaag 1300
 tgaaacaaag tggggccatt gttcatttta ttgctttggg aagagctgct 1350
 gatgaagcag taatagagat gagcaagata acaggaggaa gtcattttta 1400
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ccaatcacag tgaatgctaa aatgaataag gacgtaaaca gtttccccag 1850
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 gagccaatgt gactgctttc attgaatcac agaattggaca tacagaagtt 1950
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 agtctactcc aggtatttta cagcatatac agaaaatggc agatatagct 2050
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 ccttgaggga tttcagccga acagcatccg gaggtgcatt tgtggtatca 2250
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 caccaggaga taattttgat gttggaaaag ttcaacgtta tatcataaga 2400
 ataagtgcaa gtattcttga tctaagagac agttttgatg atgctcttca 2450
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 cattgcacaa gtaactttgt ttatccctca agcaaactct gatgacattg 2650
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3250

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<210> 70

<211> 919

<212> PRT

<213> Homo Sapien

<400> 70

Met	Gly	Leu	Phe	Arg	Gly	Phe	Val	Phe	Leu	Leu	Val	Leu	Cys	Leu
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Leu	His	Gln	Ser	Asn	Thr	Ser	Phe	Ile	Lys	Leu	Asn	Asn	Asn	Gly
				20					25					30

Phe	Glu	Asp	Ile	Val	Ile	Val	Ile	Asp	Pro	Ser	Val	Pro	Glu	Asp
				35					40					45

Glu	Lys	Ile	Ile	Glu	Gln	Ile	Glu	Asp	Met	Val	Thr	Thr	Ala	Ser
				50					55					60

Thr	Tyr	Leu	Phe	Glu	Ala	Thr	Glu	Lys	Arg	Phe	Phe	Phe	Lys	Asn
				65					70					75

Val	Ser	Ile	Leu	Ile	Pro	Glu	Asn	Trp	Lys	Glu	Asn	Pro	Gln	Tyr
				80					85					90

Lys	Arg	Pro	Lys	His	Glu	Asn	His	Lys	His	Ala	Asp	Val	Ile	Val
				95					100					105

Ala	Pro	Pro	Thr	Leu	Pro	Gly	Arg	Asp	Glu	Pro	Tyr	Thr	Lys	Gln
				110					115					120

Phe	Thr	Glu	Cys	Gly	Glu	Lys	Gly	Glu	Tyr	Ile	His	Phe	Thr	Pro
				125					130					135

Asp	Leu	Leu	Leu	Gly	Lys	Lys	Gln	Asn	Glu	Tyr	Gly	Pro	Pro	Gly
				140					145					150

Lys	Leu	Phe	Val	His	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Val	Phe
				155					160					165

Asp	Glu	Tyr	Asn	Glu	Asp	Gln	Pro	Phe	Tyr	Arg	Ala	Lys	Ser	Lys
				170					175					180

Lys	Ile	Glu	Ala	Thr	Arg	Cys	Ser	Ala	Gly	Ile	Ser	Gly	Arg	Asn
				185					190					195

Arg	Val	Tyr	Lys	Cys	Gln	Gly	Gly	Ser	Cys	Leu	Ser	Arg	Ala	Cys
				200					205					210

Arg	Ile	Asp	Ser	Thr	Thr	Lys	Leu	Tyr	Gly	Lys	Asp	Cys	Gln	Phe
				215					220					225

Phe	Pro	Asp	Lys	Val	Gln	Thr	Glu	Lys	Ala	Ser	Ile	Met	Phe	Met
				230					235					240

Gln Ser Ile Asp	Ser Val Val Glu Phe	Cys Asn Glu Lys Thr His
245	250	255
Asn Gln Glu Ala	Pro Ser Leu Gln Asn	Ile Lys Cys Asn Phe Arg
260	265	270
Ser Thr Trp Glu	Val Ile Ser Asn Ser	Glu Asp Phe Lys Asn Thr
275	280	285
Ile Pro Met Val	Thr Pro Pro Pro Pro	Pro Val Phe Ser Leu Leu
290	295	300
Lys Ile Ser Gln	Arg Ile Val Cys Leu	Val Leu Asp Lys Ser Gly
305	310	315
Ser Met Gly Gly	Lys Asp Arg Leu Asn	Arg Met Asn Gln Ala Ala
320	325	330
Lys His Phe Leu	Leu Gln Thr Val Glu	Asn Gly Ser Trp Val Gly
335	340	345
Met Val His Phe	Asp Ser Thr Ala Thr	Ile Val Asn Lys Leu Ile
350	355	360
Gln Ile Lys Ser	Ser Asp Glu Arg Asn	Thr Leu Met Ala Gly Leu
365	370	375
Pro Thr Tyr Pro	Leu Gly Gly Thr Ser	Ile Cys Ser Gly Ile Lys
380	385	390
Tyr Ala Phe Gln	Val Ile Gly Glu Leu	His Ser Gln Leu Asp Gly
395	400	405
Ser Glu Val Leu	Leu Leu Thr Asp Gly	Glu Asp Asn Thr Ala Ser
410	415	420
Ser Cys Ile Asp	Glu Val Lys Gln Ser	Gly Ala Ile Val His Phe
425	430	435
Ile Ala Leu Gly	Arg Ala Ala Asp Glu	Ala Val Ile Glu Met Ser
440	445	450
Lys Ile Thr Gly	Gly Ser His Phe Tyr	Val Ser Asp Glu Ala Gln
455	460	465
Asn Asn Gly Leu	Ile Asp Ala Phe Gly	Ala Leu Thr Ser Gly Asn
470	475	480
Thr Asp Leu Ser	Gln Lys Ser Leu Gln	Leu Glu Ser Lys Gly Leu
485	490	495
Thr Leu Asn Ser	Asn Ala Trp Met Asn	Asp Thr Val Ile Ile Asp
500	505	510
Ser Thr Val Gly	Lys Asp Thr Phe Phe	Leu Ile Thr Trp Asn Ser
515	520	525

Leu	Pro	Pro	Ser	Ile	Ser	Leu	Trp	Asp	Pro	Ser	Gly	Thr	Ile	Met	
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Glu	Asn	Phe	Thr	Val	Asp	Ala	Thr	Ser	Lys	Met	Ala	Tyr	Leu	Ser	
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Ile	Pro	Gly	Thr	Ala	Lys	Val	Gly	Thr	Trp	Ala	Tyr	Asn	Leu	Gln	
				560					565					570	
Ala	Lys	Ala	Asn	Pro	Glu	Thr	Leu	Thr	Ile	Thr	Val	Thr	Ser	Arg	
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Ala	Ala	Asn	Ser	Ser	Val	Pro	Pro	Ile	Thr	Val	Asn	Ala	Lys	Met	
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Asn	Lys	Asp	Val	Asn	Ser	Phe	Pro	Ser	Pro	Met	Ile	Val	Tyr	Ala	
				605					610					615	
Glu	Ile	Leu	Gln	Gly	Tyr	Val	Pro	Val	Leu	Gly	Ala	Asn	Val	Thr	
				620					625					630	
Ala	Phe	Ile	Glu	Ser	Gln	Asn	Gly	His	Thr	Glu	Val	Leu	Glu	Leu	
				635					640					645	
Leu	Asp	Asn	Gly	Ala	Gly	Ala	Asp	Ser	Phe	Lys	Asn	Asp	Gly	Val	
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Tyr	Ser	Arg	Tyr	Phe	Thr	Ala	Tyr	Thr	Glu	Asn	Gly	Arg	Tyr	Ser	
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Leu	Lys	Val	Arg	Ala	His	Gly	Gly	Ala	Asn	Thr	Ala	Arg	Leu	Lys	
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Leu	Arg	Pro	Pro	Leu	Asn	Arg	Ala	Ala	Tyr	Ile	Pro	Gly	Trp	Val	
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Val	Asn	Gly	Glu	Ile	Glu	Ala	Asn	Pro	Pro	Arg	Pro	Glu	Ile	Asp	
				710					715					720	
Glu	Asp	Thr	Gln	Thr	Thr	Leu	Glu	Asp	Phe	Ser	Arg	Thr	Ala	Ser	
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Gly	Gly	Ala	Phe	Val	Val	Ser	Gln	Val	Pro	Ser	Leu	Pro	Leu	Pro	
				740					745					750	
Asp	Gln	Tyr	Pro	Pro	Ser	Gln	Ile	Thr	Asp	Leu	Asp	Ala	Thr	Val	
				755					760					765	
His	Glu	Asp	Lys	Ile	Ile	Leu	Thr	Trp	Thr	Ala	Pro	Gly	Asp	Asn	
				770					775					780	
Phe	Asp	Val	Gly	Lys	Val	Gln	Arg	Tyr	Ile	Ile	Arg	Ile	Ser	Ala	
				785					790					795	
Ser	Ile	Leu	Asp	Leu	Arg	Asp	Ser	Phe	Asp	Asp	Ala	Leu	Gln	Val	
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Asn	Thr	Thr	Asp	Leu	Ser	Pro	Lys	Glu	Ala	Asn	Ser	Lys	Glu	Ser	815	820	825
Phe	Ala	Phe	Lys	Pro	Glu	Asn	Ile	Ser	Glu	Glu	Asn	Ala	Thr	His	830	835	840
Ile	Phe	Ile	Ala	Ile	Lys	Ser	Ile	Asp	Lys	Ser	Asn	Leu	Thr	Ser	845	850	855
Lys	Val	Ser	Asn	Ile	Ala	Gln	Val	Thr	Leu	Phe	Ile	Pro	Gln	Ala	860	865	870
Asn	Pro	Asp	Asp	Ile	Asp	Pro	Thr	Pro	Thr	Pro	Thr	Pro	Thr	Pro	875	880	885
Thr	Pro	Asp	Lys	Ser	His	Asn	Ser	Gly	Val	Asn	Ile	Ser	Thr	Leu	890	895	900
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Ser Thr Thr Ile

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 <211> 3877
 <212> DNA
 <213> Homo Sapien

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 35 40 45
 Pro Arg Ala Asn Ser Pro Thr Gly Lys Glu Gly Tyr Gln Ala Val
 50 55 60
 Leu Gln Glu Trp Glu Glu Gln His Arg Asn Tyr Val Ser Ser Leu
 65 70 75
 Lys Arg Gln Ile Ala Gln Leu Lys Glu Glu Leu Gln Glu Arg Ser
 80 85 90
 Glu Gln Leu Arg Asn Gly Gln Tyr Gln Ala Ser Asp Ala Ala Gly
 95 100 105
 Leu Gly Leu Asp Arg Ser Pro Pro Glu Lys Thr Gln Ala Asp Leu
 110 115 120
 Leu Ala Phe Leu His Ser Gln Val Asp Lys Ala Glu Val Asn Ala
 125 130 135
 Gly Val Lys Leu Ala Thr Glu Tyr Ala Ala Val Pro Phe Asp Ser
 140 145 150
 Phe Thr Leu Gln Lys Val Tyr Gln Leu Glu Thr Gly Leu Thr Arg
 155 160 165
 His Pro Glu Glu Lys Pro Val Arg Lys Asp Lys Arg Asp Glu Leu
 170 175 180
 Val Glu Ala Ile Glu Ser Ala Leu Glu Thr Leu Asn Asn Pro Ala

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Glu Asn Ser Pro	Asn His Arg Pro Tyr	Thr Ala Ser Asp Phe	Ile		
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Glu Gly Ile Tyr	Arg Thr Glu Arg Asp	Lys Gly Thr Leu Tyr	Glu		
	215		220		225
Leu Thr Phe Lys	Gly Asp His Lys His	Glu Phe Lys Arg Leu	Ile		
	230		235		240
Leu Phe Arg Pro	Phe Ser Pro Ile Met	Lys Val Lys Asn Glu	Lys		
	245		250		255
Leu Asn Met Ala	Asn Thr Leu Ile Asn	Val Ile Val Pro Leu	Ala		
	260		265		270
Lys Arg Val Asp	Lys Phe Arg Gln Phe	Met Gln Asn Phe Arg	Glu		
	275		280		285
Met Cys Ile Glu	Gln Asp Gly Arg Val	His Leu Thr Val Val	Tyr		
	290		295		300
Phe Gly Lys Glu	Glu Ile Asn Glu Val	Lys Gly Ile Leu Glu	Asn		
	305		310		315
Thr Ser Lys Ala	Ala Asn Phe Arg Asn	Phe Thr Phe Ile Gln	Leu		
	320		325		330
Asn Gly Glu Phe	Ser Arg Gly Lys Gly	Leu Asp Val Gly Ala	Arg		
	335		340		345
Phe Trp Lys Gly	Ser Asn Val Leu Leu	Phe Phe Cys Asp Val	Asp		
	350		355		360
Ile Tyr Phe Thr	Ser Glu Phe Leu Asn	Thr Cys Arg Leu Asn	Thr		
	365		370		375
Gln Pro Gly Lys	Lys Val Phe Tyr Pro	Val Leu Phe Ser Gln	Tyr		
	380		385		390
Asn Pro Gly Ile	Ile Tyr Gly His His	Asp Ala Val Pro Pro	Leu		
	395		400		405
Glu Gln Gln Leu	Val Ile Lys Lys Glu	Thr Gly Phe Trp Arg	Asp		
	410		415		420
Phe Gly Phe Gly	Met Thr Cys Gln Tyr	Arg Ser Asp Phe Ile	Asn		
	425		430		435
Ile Gly Gly Phe	Asp Leu Asp Ile Lys	Gly Trp Gly Gly Glu	Asp		
	440		445		450
Val His Leu Tyr	Arg Lys Tyr Leu His	Ser Asn Leu Ile Val	Val		
	455		460		465
Arg Thr Pro Val	Arg Gly Leu Phe His	Leu Trp His Glu Lys	Arg		

470	475	480
Cys Met Asp Glu Leu Thr Pro Glu Gln Tyr Lys Met Cys Met Gln		
485	490	495
Ser Lys Ala Met Asn Glu Ala Ser His Gly Gln Leu Gly Met Leu		
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Val Phe Arg His Glu Ile Glu Ala His Leu Arg Lys Gln Lys Gln		
515	520	525
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530		

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<212> PRT
<213> Homo Sapien

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Ser Pro Ile Asp Ile Gln Thr Asp Ser Val Thr Phe Asp Pro Asp
50 55 60
Leu Pro Ala Leu Gln Pro His Gly Tyr Asp Gln Pro Gly Thr Glu
65 70 75

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Pro	Ser	Thr	Leu	Tyr	Leu	Gly	Gly	Leu	Pro	Arg	Lys	Tyr	Val	Ala		95	100	105
Ala	Gln	Leu	His	Leu	His	Trp	Gly	Gln	Lys	Gly	Ser	Pro	Gly	Gly		110	115	120
Ser	Glu	His	Gln	Ile	Asn	Ser	Glu	Ala	Thr	Phe	Ala	Glu	Leu	His		125	130	135
Ile	Val	His	Tyr	Asp	Ser	Asp	Ser	Tyr	Asp	Ser	Leu	Ser	Glu	Ala		140	145	150
Ala	Glu	Arg	Pro	Gln	Gly	Leu	Ala	Val	Leu	Gly	Ile	Leu	Ile	Glu		155	160	165
Val	Gly	Glu	Thr	Lys	Asn	Ile	Ala	Tyr	Glu	His	Ile	Leu	Ser	His		170	175	180
Leu	His	Glu	Val	Arg	His	Lys	Asp	Gln	Lys	Thr	Ser	Val	Pro	Pro		185	190	195
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Ser	Lys	Leu	Leu	Val	Gln	Asn	Tyr	Arg	Ala	Leu	Gln	Pro	Leu	Asn		260	265	270
Gln	Arg	Met	Val	Phe	Ala	Ser	Phe	Ile	Gln	Ala	Gly	Ser	Ser	Tyr		275	280	285
Thr	Thr	Gly	Glu	Met	Leu	Ser	Leu	Gly	Val	Gly	Ile	Leu	Val	Gly		290	295	300
Cys	Leu	Cys	Leu	Leu	Leu	Ala	Val	Tyr	Phe	Ile	Ala	Arg	Lys	Ile		305	310	315
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<210> 75
 <211> 1743
 <212> DNA

<213> Homo Sapien

<400> 75

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ttgtcagtgt ctgtgagaat tacttatttc ttttctctat tctcatagca 1600
cgtgtgtgat tggttcatgc atgtaggtct cttacaatg atggtgggcc 1650
tctggagtcc aggggctggc cggttgttct atgcagagaa agcagtcaat 1700
aatgtttgc cagactgggt gcagaattta ttcaggtggg tgt 1743

<210> 76
<211> 442
<212> PRT
<213> Homo Sapien

<400> 76
Met Ser Tyr Asn Gly Leu His Gln Arg Val Phe Lys Glu Leu Lys
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Leu Leu Thr Leu Cys Ser Ile Ser Ser Gln Ile Gly Pro Pro Glu
20 25 30
Val Ala Leu Thr Thr Asp Glu Lys Ser Ile Ser Val Val Leu Thr
35 40 45
Ala Pro Glu Lys Trp Lys Arg Asn Pro Glu Asp Leu Pro Val Ser
50 55 60
Met Gln Gln Ile Tyr Ser Asn Leu Lys Tyr Asn Val Ser Val Leu
65 70 75
Asn Thr Lys Ser Asn Arg Thr Trp Ser Gln Cys Val Thr Asn His
80 85 90
Thr Leu Val Leu Thr Trp Leu Glu Pro Asn Thr Leu Tyr Cys Val
95 100 105
His Val Glu Ser Phe Val Pro Gly Pro Pro Arg Arg Ala Gln Pro
110 115 120
Ser Glu Lys Gln Cys Ala Arg Thr Leu Lys Asp Gln Ser Ser Glu
125 130 135
Phe Lys Ala Lys Ile Ile Phe Trp Tyr Val Leu Pro Ile Ser Ile
140 145 150
Thr Val Phe Leu Phe Ser Val Met Gly Tyr Ser Ile Tyr Arg Tyr
155 160 165
Ile His Val Gly Lys Glu Lys His Pro Ala Asn Leu Ile Leu Ile
170 175 180

Tyr Gly Asn Glu Phe Asp Lys Arg Phe Phe Val Pro Ala Glu Lys	185	190	195
Ile Val Ile Asn Phe Ile Thr Leu Asn Ile Ser Asp Asp Ser Lys	200	205	210
Ile Ser His Gln Asp Met Ser Leu Leu Gly Lys Ser Ser Asp Val	215	220	225
Ser Ser Leu Asn Asp Pro Gln Pro Ser Gly Asn Leu Arg Pro Pro	230	235	240
Gln Glu Glu Glu Glu Val Lys His Leu Gly Tyr Ala Ser His Leu	245	250	255
Met Glu Ile Phe Cys Asp Ser Glu Glu Asn Thr Glu Gly Thr Ser	260	265	270
Leu Thr Gln Gln Glu Ser Leu Ser Arg Thr Ile Pro Pro Asp Lys	275	280	285
Thr Val Ile Glu Tyr Glu Tyr Asp Val Arg Thr Thr Asp Ile Cys	290	295	300
Ala Gly Pro Glu Glu Gln Glu Leu Ser Leu Gln Glu Glu Val Ser	305	310	315
Thr Gln Gly Thr Leu Leu Glu Ser Gln Ala Ala Leu Ala Val Leu	320	325	330
Gly Pro Gln Thr Leu Gln Tyr Ser Tyr Thr Pro Gln Leu Gln Asp	335	340	345
Leu Asp Pro Leu Ala Gln Glu His Thr Asp Ser Glu Glu Gly Pro	350	355	360
Glu Glu Glu Pro Ser Thr Thr Leu Val Asp Trp Asp Pro Gln Thr	365	370	375
Gly Arg Leu Cys Ile Pro Ser Leu Ser Ser Phe Asp Gln Asp Ser	380	385	390
Glu Gly Cys Glu Pro Ser Glu Gly Asp Gly Leu Gly Glu Glu Gly	395	400	405
Leu Leu Ser Arg Leu Tyr Glu Glu Pro Ala Pro Asp Arg Pro Pro	410	415	420
Gly Glu Asn Glu Thr Tyr Leu Met Gln Phe Met Glu Glu Trp Gly	425	430	435
Leu Tyr Val Gln Met Glu Asn	440		

<210> 77
 <211> 1636
 <212> DNA

<213> Homo Sapien

<400> 77

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ctctgtggtt tgctggcagc caccttgatc caagccaccc tcagtccac 150
tgcagttctc atcctcggcc caaaagtcac caaagaaaag ctgacacagg 200
agctgaagga ccacaacgcc accagcatcc tgcagcagct gccgctgctc 250
agtgccatgc gggaaaagcc agccggaggc atccctgtgc tgggcagcct 300
ggtgaacacc gtctgaagc acatcatctg gctgaaggtc atcacagcta 350
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gtcaagatcc ccttgacat ggtggctgga ttcaacacgc ccttgggtcaa 450
gaccatcgtg gagttccaca tgacgactga ggccaagcc accatccgca 500
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ggcatgtatg cagacctcct gcagctgggtg aagggtgcca tttccctcag 750
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ccattcagct ctacctgggg gccaaagttgt tggactcaca gggaaagggtg 850
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cacctgggc atcgaagcca gctcggaagc tcagttttac accaaagggtg 1250
accaacttat actcaacttg aataacatca gctctgatcg gatccagctg 1300
atgaactctg ggattggctg gttccaacct gatgttctga aaaacatcat 1350
cactgagatc atccactcca tcctgctgcc gaaccagaat ggcaaattaa 1400

gatctgggggt cccagtgtca ttggtgaagg ccttgggatt cgaggcagct 1450
gagtcctcac tgaccaagga tgcccttgtg cttactccag cctccttgtg 1500
gaaaccacgc tctcctgtct cccagtgaag acttggatgg cagccatcag 1550
ggaaggctgg gtcccagctg ggagtatggg tgtgagctct atagaccatc 1600
cctctctgca atcaataaac acttgctgtg gaaaaa 1636

<210> 78
<211> 484
<212> PRT
<213> Homo Sapien

<400> 78
Met Ala Gly Pro Trp Thr Phe Thr Leu Leu Cys Gly Leu Leu Ala
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Ala Thr Leu Ile Gln Ala Thr Leu Ser Pro Thr Ala Val Leu Ile
20 25 30
Leu Gly Pro Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys
35 40 45
Asp His Asn Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Ser
50 55 60
Ala Met Arg Glu Lys Pro Ala Gly Gly Ile Pro Val Leu Gly Ser
65 70 75
Leu Val Asn Thr Val Leu Lys His Ile Ile Trp Leu Lys Val Ile
80 85 90
Thr Ala Asn Ile Leu Gln Leu Gln Val Lys Pro Ser Ala Asn Asp
95 100 105
Gln Glu Leu Leu Val Lys Ile Pro Leu Asp Met Val Ala Gly Phe
110 115 120
Asn Thr Pro Leu Val Lys Thr Ile Val Glu Phe His Met Thr Thr
125 130 135
Glu Ala Gln Ala Thr Ile Arg Met Asp Thr Ser Ala Ser Gly Pro
140 145 150
Thr Arg Leu Val Leu Ser Asp Cys Ala Thr Ser His Gly Ser Leu
155 160 165
Arg Ile Gln Leu Leu Tyr Lys Leu Ser Phe Leu Val Asn Ala Leu
170 175 180
Ala Lys Gln Val Met Asn Leu Leu Val Pro Ser Leu Pro Asn Leu
185 190 195
Val Lys Asn Gln Leu Cys Pro Val Ile Glu Ala Ser Phe Asn Gly

				200					205					210
Met	Tyr	Ala	Asp	Leu	Leu	Gln	Leu	Val	Lys	Val	Pro	Ile	Ser	Leu
				215					220					225
Ser	Ile	Asp	Arg	Leu	Glu	Phe	Asp	Leu	Leu	Tyr	Pro	Ala	Ile	Lys
				230					235					240
Gly	Asp	Thr	Ile	Gln	Leu	Tyr	Leu	Gly	Ala	Lys	Leu	Leu	Asp	Ser
				245					250					255
Gln	Gly	Lys	Val	Thr	Lys	Trp	Phe	Asn	Asn	Ser	Ala	Ala	Ser	Leu
				260					265					270
Thr	Met	Pro	Thr	Leu	Asp	Asn	Ile	Pro	Phe	Ser	Leu	Ile	Val	Ser
				275					280					285
Gln	Asp	Val	Val	Lys	Ala	Ala	Val	Ala	Ala	Val	Leu	Ser	Pro	Glu
				290					295					300
Glu	Phe	Met	Val	Leu	Leu	Asp	Ser	Val	Leu	Pro	Glu	Ser	Ala	His
				305					310					315
Arg	Leu	Lys	Ser	Ser	Ile	Gly	Leu	Ile	Asn	Glu	Lys	Ala	Ala	Asp
				320					325					330
Lys	Leu	Gly	Ser	Thr	Gln	Ile	Val	Lys	Ile	Leu	Thr	Gln	Asp	Thr
				335					340					345
Pro	Glu	Phe	Phe	Ile	Asp	Gln	Gly	His	Ala	Lys	Val	Ala	Gln	Leu
				350					355					360
Ile	Val	Leu	Glu	Val	Phe	Pro	Ser	Ser	Glu	Ala	Leu	Arg	Pro	Leu
				365					370					375
Phe	Thr	Leu	Gly	Ile	Glu	Ala	Ser	Ser	Glu	Ala	Gln	Phe	Tyr	Thr
				380					385					390
Lys	Gly	Asp	Gln	Leu	Ile	Leu	Asn	Leu	Asn	Asn	Ile	Ser	Ser	Asp
				395					400					405
Arg	Ile	Gln	Leu	Met	Asn	Ser	Gly	Ile	Gly	Trp	Phe	Gln	Pro	Asp
				410					415					420
Val	Leu	Lys	Asn	Ile	Ile	Thr	Glu	Ile	Ile	His	Ser	Ile	Leu	Leu
				425					430					435
Pro	Asn	Gln	Asn	Gly	Lys	Leu	Arg	Ser	Gly	Val	Pro	Val	Ser	Leu
				440					445					450
Val	Lys	Ala	Leu	Gly	Phe	Glu	Ala	Ala	Glu	Ser	Ser	Leu	Thr	Lys
				455					460					465
Asp	Ala	Leu	Val	Leu	Thr	Pro	Ala	Ser	Leu	Trp	Lys	Pro	Ser	Ser
				470					475					480
Pro	Val	Ser	Gln											

<210> 79
<211> 1475
<212> DNA
<213> Homo Sapien

<400> 79
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gcttctactg agaggtctgc catggcctct cttggcctcc aacttgtggg 150
ctacatccta ggccttctgg ggcttttggg cacactgggt gccatgctgc 200
tccccagctg gaaaacaagt tcttatgtcg gtgccagcat tgtgacagca 250
gttggtctct ccaagggcct ctggatggaa tgtgccacac acagcacagg 300
catcaccag tgtgacatct atagcaccct tctgggcctg cccgctgaca 350
tccaggtgc ccaggccatg atggtgacat ccagtgcaat ctccctccctg 400
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ttggaggcct cctgggattc attcctgttg cctggaatct tcatgggata 550
ctacgggact tctactcacc actggtgcct gacagcatga aatttgagat 600
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tactacgatg cctaccaagc ccaacctctt gccacaagga gctctccaag 750
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cagggtatgt gtgaagaacc aggggccaga gctgggggggt ggctgggtct 850
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ccctctctct ggctgaggtt ggctcttagc tcattgctgg ggatgggaag 1250

gagaagcagt ggcttttgtg ggcattgctc taacctactt ctcaagcttc 1300
 cctccaaaga aactgattgg ccctggaacc tccatccac tcttggtatg 1350
 actccacagt gtccagacta atttgtgcat gaactgaaat aaaaccatcc 1400
 tacggtatcc agggaacaga aagcaggatg caggatggga ggacaggaag 1450
 gcagcctggg acatttaaaa aaata 1475

<210> 80
 <211> 230
 <212> PRT
 <213> Homo Sapien

<400> 80
 Met Ala Ser Leu Gly Leu Gln Leu Val Gly Tyr Ile Leu Gly Leu
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 Leu Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp
 20 25 30
 Lys Thr Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly
 35 40 45
 Phe Ser Lys Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly
 50 55 60
 Ile Thr Gln Cys Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala
 65 70 75
 Asp Ile Gln Ala Ala Gln Ala Met Met Val Thr Ser Ser Ala Ile
 80 85 90
 Ser Ser Leu Ala Cys Ile Ile Ser Val Val Gly Met Arg Cys Thr
 95 100 105
 Val Phe Cys Gln Glu Ser Arg Ala Lys Asp Arg Val Ala Val Ala
 110 115 120
 Gly Gly Val Phe Phe Ile Leu Gly Gly Leu Leu Gly Phe Ile Pro
 125 130 135
 Val Ala Trp Asn Leu His Gly Ile Leu Arg Asp Phe Tyr Ser Pro
 140 145 150
 Leu Val Pro Asp Ser Met Lys Phe Glu Ile Gly Glu Ala Leu Tyr
 155 160 165
 Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile Ala Gly Ile Ile
 170 175 180
 Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser Asn Tyr Tyr
 185 190 195
 Asp Ala Tyr Gln Ala Gln Pro Leu Ala Thr Arg Ser Ser Pro Arg
 200 205 210

Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr Ser
 215 220 225

Leu Thr Gly Tyr Val
 230

<210> 81
 <211> 1732
 <212> DNA
 <213> Homo Sapien

<400> 81
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 cttagacctc ccttccctgcc ctcccttccct gccaccgct gcttccctggc 150
 ccttctccga ccccgctcta gcagcagacc tccctggggtc tgtggggtga 200
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 ccgctcccgg accagcggcc tgacctggg gaaaggatgg ttcccagagt 300
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 actcccacgc tcgagcccgc ccagacatgt tctgcctttt ccatgggaag 400
 agatactccc ccggcgagag ctggcacccc tacttggagc cacaaggcct 450
 gatgtactgc ctgcgctgta cctgctcaga gggcgcccat gtgagttgtt 500
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 cagcaatgct gtcccaagtg tgtggaacct cacactccct ctggactccg 600
 ggccccacca aagtccctgcc agcacacagg gacctgtac caacacggag 650
 agatcttcag tgcccatgag ctgttccct cccgcctgcc caaccagtgt 700
 gtccctctgca gctgcacaga gggccagatc tactgcggcc tcacaacctg 750
 cccgaacca ggctgccag caccctccc actgccagac tccctgctgcc 800
 aagcctgcaa agatgaggca agtgagcaat cggatgaaga ggacagtgtg 850
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 tcggcccctt gccctgcac ctatgcacct gtgaggatgg ccgccaggac 1150

tggcagcgtg tgacctgtcc caccgagtag ccttgccgtc accccgagaa 1200
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 cctggaacac gaggcctcgg acttggtgga gatctacctc tggaagctgg 1400
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 aagacttcca gaaagaggca cagcacttcc gactgctcgc tggccccac 1550
 gaaggtcact ggaacgtctt cctagccag accctggagc tgaaggtcac 1600
 ggccagtcca gacaaagtga ccaagacata acaaagacct aacagttgca 1650
 gatatgagct gtataattgt tggtattata tattaataaa taagaagttg 1700
 cattaccctc aaaaaaaaaa aaaaaaaaaa aa 1732

<210> 82
 <211> 451
 <212> PRT
 <213> Homo Sapien

<400> 82
 Met Val Pro Glu Val Arg Val Leu Ser Ser Leu Leu Gly Leu Ala
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 Leu Leu Trp Phe Pro Leu Asp Ser His Ala Arg Ala Arg Pro Asp
 20 25 30
 Met Phe Cys Leu Phe His Gly Lys Arg Tyr Ser Pro Gly Glu Ser
 35 40 45
 Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg
 50 55 60
 Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His
 65 70 75
 Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln
 80 85 90
 Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu Arg
 95 100 105
 Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His
 110 115 120
 Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro
 125 130 135

Asn	Gln	Cys	Val	Leu	Cys	Ser	Cys	Thr	Glu	Gly	Gln	Ile	Tyr	Cys		140	145	150
Gly	Leu	Thr	Thr	Cys	Pro	Glu	Pro	Gly	Cys	Pro	Ala	Pro	Leu	Pro		155	160	165
Leu	Pro	Asp	Ser	Cys	Cys	Gln	Ala	Cys	Lys	Asp	Glu	Ala	Ser	Glu		170	175	180
Gln	Ser	Asp	Glu	Glu	Asp	Ser	Val	Gln	Ser	Leu	His	Gly	Val	Arg		185	190	195
His	Pro	Gln	Asp	Pro	Cys	Ser	Ser	Asp	Ala	Gly	Arg	Lys	Arg	Gly		200	205	210
Pro	Gly	Thr	Pro	Ala	Pro	Thr	Gly	Leu	Ser	Ala	Pro	Leu	Ser	Phe		215	220	225
Ile	Pro	Arg	His	Phe	Arg	Pro	Lys	Gly	Ala	Gly	Ser	Thr	Thr	Val		230	235	240
Lys	Ile	Val	Leu	Lys	Glu	Lys	His	Lys	Lys	Ala	Cys	Val	His	Gly		245	250	255
Gly	Lys	Thr	Tyr	Ser	His	Gly	Glu	Val	Trp	His	Pro	Ala	Phe	Arg		260	265	270
Ala	Phe	Gly	Pro	Leu	Pro	Cys	Ile	Leu	Cys	Thr	Cys	Glu	Asp	Gly		275	280	285
Arg	Gln	Asp	Cys	Gln	Arg	Val	Thr	Cys	Pro	Thr	Glu	Tyr	Pro	Cys		290	295	300
Arg	His	Pro	Glu	Lys	Val	Ala	Gly	Lys	Cys	Cys	Lys	Ile	Cys	Pro		305	310	315
Glu	Asp	Lys	Ala	Asp	Pro	Gly	His	Ser	Glu	Ile	Ser	Ser	Thr	Arg		320	325	330
Cys	Pro	Lys	Ala	Pro	Gly	Arg	Val	Leu	Val	His	Thr	Ser	Val	Ser		335	340	345
Pro	Ser	Pro	Asp	Asn	Leu	Arg	Arg	Phe	Ala	Leu	Glu	His	Glu	Ala		350	355	360
Ser	Asp	Leu	Val	Glu	Ile	Tyr	Leu	Trp	Lys	Leu	Val	Lys	Asp	Glu		365	370	375
Glu	Thr	Glu	Ala	Gln	Arg	Gly	Glu	Val	Pro	Gly	Pro	Arg	Pro	His		380	385	390
Ser	Gln	Asn	Leu	Pro	Leu	Asp	Ser	Asp	Gln	Glu	Ser	Gln	Glu	Ala		395	400	405
Arg	Leu	Pro	Glu	Arg	Gly	Thr	Ala	Leu	Pro	Thr	Ala	Arg	Trp	Pro		410	415	420

Pro Arg Arg Ser Leu Glu Arg Leu Pro Ser Pro Asp Pro Gly Ala
425 430 435

Glu Gly His Gly Gln Ser Arg Gln Ser Asp Gln Asp Ile Thr Lys
440 445 450

Thr

<210> 83
<211> 2052
<212> DNA
<213> Homo Sapien

<400> 83
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gttctcctct tctctctaatt ccatccgtca cctctcctgt catccgtttc 150
catgccgtga ggtccattca cagaacacat ccatggctct catgctcagt 200
ttggttctga gtctcctcaa gctgggatca gggcagtggc aggtgtttgg 250
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gtttcctgtc tcctaagacc aatgcagagg ccatggaagt gcggttcttc 350
aggggccagt tctctagcgt ggtccacctc tacagggacg ggaaggacca 400
gccatttatg cagatgccac agtatcaagg caggacaaaa ctggtgaagg 450
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ttggatgctg gcctctatgg gtgcaggatt agttcccagt cttactacca 550
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tccatgcggc atgctcatct gagccgagag gtggaatcca gggtagagat 850
aggagatacc tttttcgagc ctatatcgtg gcacctggct accaaagtac 900
tgggaatact ctgctgtggc ctatTTTTTg gcattgttgg actgaagatt 950
ttcttctcca aattccagtg gaaaatccag gcggaactgg actggagaag 1000
aaagcacgga caggcagaat tgagagacgc ccggaacac gcagtggagg 1050

tgactctgga tccagagacg gctcacccga agctctgcgt ttctgatctg 1100
 aaaactgtaa cccatagaaa agctccccag gaggtgcctc actctgagaa 1150
 gagatttaca aggaagagtg tgggtggcttc tcagagtttc caagcagggg 1200
 aacattactg ggaggtggac ggaggacaca ataaaaggtg gcgcgtggga 1250
 gtgtgccggg atgatgtgga caggaggaag gagtacgtga ctttgtctcc 1300
 cgatcatggg tactgggtcc tcagactgaa tggagaacat ttgtatttca 1350
 cattaaatcc ccgttttatc agcgtcttcc ccaggacccc acctacaaaa 1400
 ataggggtct tcctggacta tgagtgtggg accatctcct tcttcaacat 1450
 aaatgaccag tcccttattt ataccctgac atgtcgggtt gaaggcttat 1500
 tgaggcccta cattgagtat ccgtcctata atgagcaaaa tggaactccc 1550
 atagtcatct gccagtcac ccaggaatca gagaaagagg cctcttggca 1600
 aagggcctct gcaatcccag agacaagcaa cagtgagtcc tcctcacagg 1650
 caaccacgcc cttcctcccc aggggtgaaa tgtaggatga atcacatccc 1700
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 tgtagattaa gtagacaagg aatgtgaata atgcttagat cttattgatg 2000
 acagagtgta tcctaatggt ttgttcatta tattacactt tcagtaaaaa 2050

aa 2052

<210> 84
 <211> 500
 <212> PRT
 <213> Homo Sapien

<400> 84
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 Ser Gly Gln Trp Gln Val Phe Gly Pro Asp Lys Pro Val Gln Ala
 20 25 30
 Leu Val Gly Glu Asp Ala Ala Phe Ser Cys Phe Leu Ser Pro Lys
 35 40 45
 Thr Asn Ala Glu Ala Met Glu Val Arg Phe Phe Arg Gly Gln Phe

				50					55					60
Ser	Ser	Val	Val	His	Leu	Tyr	Arg	Asp	Gly	Lys	Asp	Gln	Pro	Phe
				65					70					75
Met	Gln	Met	Pro	Gln	Tyr	Gln	Gly	Arg	Thr	Lys	Leu	Val	Lys	Asp
				80					85					90
Ser	Ile	Ala	Glu	Gly	Arg	Ile	Ser	Leu	Arg	Leu	Glu	Asn	Ile	Thr
				95					100					105
Val	Leu	Asp	Ala	Gly	Leu	Tyr	Gly	Cys	Arg	Ile	Ser	Ser	Gln	Ser
				110					115					120
Tyr	Tyr	Gln	Lys	Ala	Ile	Trp	Glu	Leu	Gln	Val	Ser	Ala	Leu	Gly
				125					130					135
Ser	Val	Pro	Leu	Ile	Ser	Ile	Thr	Gly	Tyr	Val	Asp	Arg	Asp	Ile
				140					145					150
Gln	Leu	Leu	Cys	Gln	Ser	Ser	Gly	Trp	Phe	Pro	Arg	Pro	Thr	Ala
				155					160					165
Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser	Thr	Asp	Ser	Arg
				170					175					180
Thr	Asn	Arg	Asp	Met	His	Gly	Leu	Phe	Asp	Val	Glu	Ile	Ser	Leu
				185					190					195
Thr	Val	Gln	Glu	Asn	Ala	Gly	Ser	Ile	Ser	Cys	Ser	Met	Arg	His
				200					205					210
Ala	His	Leu	Ser	Arg	Glu	Val	Glu	Ser	Arg	Val	Gln	Ile	Gly	Asp
				215					220					225
Thr	Phe	Phe	Glu	Pro	Ile	Ser	Trp	His	Leu	Ala	Thr	Lys	Val	Leu
				230					235					240
Gly	Ile	Leu	Cys	Cys	Gly	Leu	Phe	Phe	Gly	Ile	Val	Gly	Leu	Lys
				245					250					255
Ile	Phe	Phe	Ser	Lys	Phe	Gln	Trp	Lys	Ile	Gln	Ala	Glu	Leu	Asp
				260					265					270
Trp	Arg	Arg	Lys	His	Gly	Gln	Ala	Glu	Leu	Arg	Asp	Ala	Arg	Lys
				275					280					285
His	Ala	Val	Glu	Val	Thr	Leu	Asp	Pro	Glu	Thr	Ala	His	Pro	Lys
				290					295					300
Leu	Cys	Val	Ser	Asp	Leu	Lys	Thr	Val	Thr	His	Arg	Lys	Ala	Pro
				305					310					315
Gln	Glu	Val	Pro	His	Ser	Glu	Lys	Arg	Phe	Thr	Arg	Lys	Ser	Val
				320					325					330
Val	Ala	Ser	Gln	Ser	Phe	Gln	Ala	Gly	Lys	His	Tyr	Trp	Glu	Val

335	340	345
Asp Gly Gly His Asn Lys Arg Trp Arg	Val Gly Val Cys Arg Asp	
350	355	360
Asp Val Asp Arg Arg Lys Glu Tyr Val	Thr Leu Ser Pro Asp His	
365	370	375
Gly Tyr Trp Val Leu Arg Leu Asn Gly	Glu His Leu Tyr Phe Thr	
380	385	390
Leu Asn Pro Arg Phe Ile Ser Val Phe	Pro Arg Thr Pro Pro Thr	
395	400	405
Lys Ile Gly Val Phe Leu Asp Tyr Glu	Cys Gly Thr Ile Ser Phe	
410	415	420
Phe Asn Ile Asn Asp Gln Ser Leu Ile	Tyr Thr Leu Thr Cys Arg	
425	430	435
Phe Glu Gly Leu Leu Arg Pro Tyr Ile	Glu Tyr Pro Ser Tyr Asn	
440	445	450
Glu Gln Asn Gly Thr Pro Ile Val Ile	Cys Pro Val Thr Gln Glu	
455	460	465
Ser Glu Lys Glu Ala Ser Trp Gln Arg	Ala Ser Ala Ile Pro Glu	
470	475	480
Thr Ser Asn Ser Glu Ser Ser Ser Gln	Ala Thr Thr Pro Phe Leu	
485	490	495
Pro Arg Gly Glu Met		
500		

<210> 85
 <211> 1665
 <212> DNA
 <213> Homo Sapien

<400> 85
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 gtaaactgct gacgatgcag agttccgtga cggatgcagga aggcctgtgt 150
 gtccatgtgc cctgctcctt ctctacccc tcgcatggct ggatttacct 200
 tggcccagta gttcatggct actggttccg ggaagggggc aatacagacc 250
 aggatgctcc agtggccaca aacaacccag ctcgggcagt gtgggaggag 300
 actcgggacc gattccacct ccttggggac ccacatacca agaattgcac 350
 cctgagcatc agagatgcc aagaagtga tgcggggaga tacttctttc 400

gtatggagaa aggaagtata aaatggaatt ataaacatca ccggctctct 450
 gtgaatgtga cagccttgac ccacaggccc aacatcctca tcccaggcac 500
 cctggagtcc ggctgcccc agaatctgac ctgctctgtg ccctgggcct 550
 gtgagcaggg gacaccccct atgatctcct ggataggggac ctccgtgtcc 600
 cccctggacc cctccaccac ccgctcctcg gtgctcacc tcatcccaca 650
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 cagaacttga ccatgactgt cttccaagga gacggcacag tatccacagt 800
 cttgggaaat ggctcatctc tgtcactccc agagggccag tctctgcgcc 850
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 tgattcttgt agaattaaca gccctcaacg tgatgagcta tgataaact 1550
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<210> 86
 <211> 463
 <212> PRT
 <213> Homo Sapien

<400> 86

Met	Leu	Leu	Leu	Leu	Leu	Pro	Leu	Leu	Trp	Gly	Arg	Glu	Arg	Ala
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Glu	Gly	Gln	Thr	Ser	Lys	Leu	Leu	Thr	Met	Gln	Ser	Ser	Val	Thr
				20					25					30
Val	Gln	Glu	Gly	Leu	Cys	Val	His	Val	Pro	Cys	Ser	Phe	Ser	Tyr
				35					40					45
Pro	Ser	His	Gly	Trp	Ile	Tyr	Pro	Gly	Pro	Val	Val	His	Gly	Tyr
				50					55					60
Trp	Phe	Arg	Glu	Gly	Ala	Asn	Thr	Asp	Gln	Asp	Ala	Pro	Val	Ala
				65					70					75
Thr	Asn	Asn	Pro	Ala	Arg	Ala	Val	Trp	Glu	Glu	Thr	Arg	Asp	Arg
				80					85					90
Phe	His	Leu	Leu	Gly	Asp	Pro	His	Thr	Lys	Asn	Cys	Thr	Leu	Ser
				95					100					105
Ile	Arg	Asp	Ala	Arg	Arg	Ser	Asp	Ala	Gly	Arg	Tyr	Phe	Phe	Arg
				110					115					120
Met	Glu	Lys	Gly	Ser	Ile	Lys	Trp	Asn	Tyr	Lys	His	His	Arg	Leu
				125					130					135
Ser	Val	Asn	Val	Thr	Ala	Leu	Thr	His	Arg	Pro	Asn	Ile	Leu	Ile
				140					145					150
Pro	Gly	Thr	Leu	Glu	Ser	Gly	Cys	Pro	Gln	Asn	Leu	Thr	Cys	Ser
				155					160					165
Val	Pro	Trp	Ala	Cys	Glu	Gln	Gly	Thr	Pro	Pro	Met	Ile	Ser	Trp
				170					175					180
Ile	Gly	Thr	Ser	Val	Ser	Pro	Leu	Asp	Pro	Ser	Thr	Thr	Arg	Ser
				185					190					195
Ser	Val	Leu	Thr	Leu	Ile	Pro	Gln	Pro	Gln	Asp	His	Gly	Thr	Ser
				200					205					210
Leu	Thr	Cys	Gln	Val	Thr	Phe	Pro	Gly	Ala	Ser	Val	Thr	Thr	Asn
				215					220					225
Lys	Thr	Val	His	Leu	Asn	Val	Ser	Tyr	Pro	Pro	Gln	Asn	Leu	Thr
				230					235					240
Met	Thr	Val	Phe	Gln	Gly	Asp	Gly	Thr	Val	Ser	Thr	Val	Leu	Gly
				245					250					255
Asn	Gly	Ser	Ser	Leu	Ser	Leu	Pro	Glu	Gly	Gln	Ser	Leu	Arg	Leu
				260					265					270
Val	Cys	Ala	Val	Asp	Ala	Val	Asp	Ser	Asn	Pro	Pro	Ala	Arg	Leu
				275					280					285

Ser	Leu	Ser	Trp	Arg	Gly	Leu	Thr	Leu	Cys	Pro	Ser	Gln	Pro	Ser	
				290					295					300	
Asn	Pro	Gly	Val	Leu	Glu	Leu	Pro	Trp	Val	His	Leu	Arg	Asp	Ala	
				305					310					315	
Ala	Glu	Phe	Thr	Cys	Arg	Ala	Gln	Asn	Pro	Leu	Gly	Ser	Gln	Gln	
				320					325					330	
Val	Tyr	Leu	Asn	Val	Ser	Leu	Gln	Ser	Lys	Ala	Thr	Ser	Gly	Val	
				335					340					345	
Thr	Gln	Gly	Val	Val	Gly	Gly	Ala	Gly	Ala	Thr	Ala	Leu	Val	Phe	
				350					355					360	
Leu	Ser	Phe	Cys	Val	Ile	Phe	Val	Val	Val	Arg	Ser	Cys	Arg	Lys	
				365					370					375	
Lys	Ser	Ala	Arg	Pro	Ala	Ala	Gly	Val	Gly	Asp	Thr	Gly	Ile	Glu	
				380					385					390	
Asp	Ala	Asn	Ala	Val	Arg	Gly	Ser	Ala	Ser	Gln	Gly	Pro	Leu	Thr	
				395					400					405	
Glu	Pro	Trp	Ala	Glu	Asp	Ser	Pro	Pro	Asp	Gln	Pro	Pro	Pro	Ala	
				410					415					420	
Ser	Ala	Arg	Ser	Ser	Val	Gly	Glu	Gly	Glu	Leu	Gln	Tyr	Ala	Ser	
				425					430					435	
Leu	Ser	Phe	Gln	Met	Val	Lys	Pro	Trp	Asp	Ser	Arg	Gly	Gln	Glu	
				440					445					450	
Ala	Thr	Asp	Thr	Glu	Tyr	Ser	Glu	Ile	Lys	Ile	His	Arg			
				455					460						

<210> 87
 <211> 1176
 <212> DNA
 <213> Homo Sapien

<400> 87
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 caatgaacca actcagcttc ctgctgtttc tcatagcgac caccagagga 150
 tggagtacag atgaggctaa tacttacttc aaggaatgga cctgttcttc 200
 gtctccatct ctgccagaa gctgcaagga aatcaaagac gaatgtccta 250
 gtgcatttga tggcctgtat tttctccgca ctgagaatgg tggtatctac 300
 cagaccttct gtgacatgac ctctgggggt ggcggctgga ccctggtggc 350
 cagcgtgcat gagaatgaca tgcgtgggaa gtgcacggtg ggcgatcgct 400

ggtccagtca gcagggcagc aaagcagact acccagaggg ggacggcaac 450
 tgggccaact acaacacctt tggatctgca gaggcggcca cgagcgatga 500
 ctacaagaac cctggctact acgacatcca ggccaaggac ctgggcatct 550
 ggcacgtgcc caataagtcc cccatgcagc actggagaaa cagctccctg 600
 ctgaggtacc gcacggacac tggcttcctc cagacactgg gacataatct 650
 gtttggcatc taccagaaat atccagtga atatggagaa ggaaagtgtt 700
 ggactgacaa cggcccgggtg atccctgtgg tctatgattt tggcgacgcc 750
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 gggatttggt cagttcaggg tatttaataa cgagagagca gccaacgcct 850
 tgtgtgctgg aatgaggggc accggatgta aactgagca tcaactgcatt 900
 ggtggaggag gatactttcc agaggccagt cccagcagt gtggagattt 950
 ttctggtttt gattggagtg gatatggaac tcatgttggt tacagcagca 1000
 gccgtgagat aactgaggca gctgtgcttc tattctatcg ttgagagttt 1050
 tgtgggaggg aaccagacc tctcctccca accatgagat cccaaggatg 1100
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 taaatcatat tgactcaaga aaaaaa 1176

<210> 88
 <211> 313
 <212> PRT
 <213> Homo Sapien

<400> 88
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 Gly Trp Ser Thr Asp Glu Ala Asn Thr Tyr Phe Lys Glu Trp Thr
 20 25 30
 Cys Ser Ser Ser Pro Ser Leu Pro Arg Ser Cys Lys Glu Ile Lys
 35 40 45
 Asp Glu Cys Pro Ser Ala Phe Asp Gly Leu Tyr Phe Leu Arg Thr
 50 55 60
 Glu Asn Gly Val Ile Tyr Gln Thr Phe Cys Asp Met Thr Ser Gly
 65 70 75
 Gly Gly Gly Trp Thr Leu Val Ala Ser Val His Glu Asn Asp Met
 80 85 90

Arg Gly Lys Cys Thr Val Gly Asp Arg Trp Ser Ser Gln Gln Gly	95	100	105
Ser Lys Ala Asp Tyr Pro Glu Gly Asp Gly Asn Trp Ala Asn Tyr	110	115	120
Asn Thr Phe Gly Ser Ala Glu Ala Ala Thr Ser Asp Asp Tyr Lys	125	130	135
Asn Pro Gly Tyr Tyr Asp Ile Gln Ala Lys Asp Leu Gly Ile Trp	140	145	150
His Val Pro Asn Lys Ser Pro Met Gln His Trp Arg Asn Ser Ser	155	160	165
Leu Leu Arg Tyr Arg Thr Asp Thr Gly Phe Leu Gln Thr Leu Gly	170	175	180
His Asn Leu Phe Gly Ile Tyr Gln Lys Tyr Pro Val Lys Tyr Gly	185	190	195
Glu Gly Lys Cys Trp Thr Asp Asn Gly Pro Val Ile Pro Val Val	200	205	210
Tyr Asp Phe Gly Asp Ala Gln Lys Thr Ala Ser Tyr Tyr Ser Pro	215	220	225
Tyr Gly Gln Arg Glu Phe Thr Ala Gly Phe Val Gln Phe Arg Val	230	235	240
Phe Asn Asn Glu Arg Ala Ala Asn Ala Leu Cys Ala Gly Met Arg	245	250	255
Val Thr Gly Cys Asn Thr Glu His His Cys Ile Gly Gly Gly Gly	260	265	270
Tyr Phe Pro Glu Ala Ser Pro Gln Gln Cys Gly Asp Phe Ser Gly	275	280	285
Phe Asp Trp Ser Gly Tyr Gly Thr His Val Gly Tyr Ser Ser Ser	290	295	300
Arg Glu Ile Thr Glu Ala Ala Val Leu Leu Phe Tyr Arg	305	310	

<210> 89

<211> 759

<212> DNA

<213> Homo Sapien

<400> 89

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tcagggttg tgccctctcg ctctctgacg ctctggcgc atctggtggt 150

cgtcatcacc ttattctggt cccgggacag caacatacag gcctgcctgc 200
 ctctcacgtt ccccccgag gagtatgaca agcaggacat tcagctggtg 250
 gccgcgtct ctgtcacctt gggcctcttt gcagtggagc tggccggttt 300
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 aacccttctg attaccttca tgacgggaac ctaaggacga agcctacagg 550
 ggcaagggcc gcttcgtatt cctggaagaa ggaaggcata ggcttcggtt 600
 ttcccctcgg aaactgcttc tgctggagga tatgtgttgg aataattacg 650
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 aaaaaaaaa 759

<210> 90
 <211> 140
 <212> PRT
 <213> Homo Sapien

<400> 90
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 20 25 30
 Ser Asn Ile Gln Ala Cys Leu Pro Leu Thr Phe Thr Pro Glu Glu
 35 40 45
 Tyr Asp Lys Gln Asp Ile Gln Leu Val Ala Ala Leu Ser Val Thr
 50 55 60
 Leu Gly Leu Phe Ala Val Glu Leu Ala Gly Phe Leu Ser Gly Val
 65 70 75
 Ser Met Phe Asn Ser Thr Gln Ser Leu Ile Ser Ile Gly Ala His
 80 85 90
 Cys Ser Ala Ser Val Ala Leu Ser Phe Phe Ile Phe Glu Arg Trp
 95 100 105
 Glu Cys Thr Thr Tyr Trp Tyr Ile Phe Val Phe Cys Ser Ala Leu
 110 115 120
 Pro Ala Val Thr Glu Met Ala Leu Phe Val Thr Val Phe Gly Leu

	125	130	135
Lys Lys Lys Pro Phe			
140			
<210> 91			
<211> 1871			
<212> DNA			
<213> Homo Sapien			
<400> 91			
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tctatctggt	catctgtggc	caggatgatg	gtcctcccgg ctcagaggac 150
cctgagcgtg	atgaccacga	gggccagccc	cggccccggg tgcctcgga 200
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cacttccaac	acaatgccac	aggccaggga	aacatctcca tcagcctcgt 500
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<210> 92

<211> 252

<212> PRT

<213> Homo Sapien

<400> 92

Met	Gln	Leu	Thr	Arg	Cys	Cys	Phe	Val	Phe	Leu	Val	Gln	Gly	Ser
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Leu	Tyr	Leu	Val	Ile	Cys	Gly	Gln	Asp	Asp	Gly	Pro	Pro	Gly	Ser
				20					25					30
Glu	Asp	Pro	Glu	Arg	Asp	Asp	His	Glu	Gly	Gln	Pro	Arg	Pro	Arg
				35					40					45
Val	Pro	Arg	Lys	Arg	Gly	His	Ile	Ser	Pro	Lys	Ser	Arg	Pro	Met
				50					55					60
Ala	Asn	Ser	Thr	Leu	Leu	Gly	Leu	Leu	Ala	Pro	Pro	Gly	Glu	Ala
				65					70					75
Trp	Gly	Ile	Leu	Gly	Gln	Pro	Pro	Asn	Arg	Pro	Asn	His	Ser	Pro
				80					85					90
Pro	Pro	Ser	Ala	Lys	Val	Lys	Lys	Ile	Phe	Gly	Trp	Gly	Asp	Phe
				95					100					105
Tyr	Ser	Asn	Ile	Lys	Thr	Val	Ala	Leu	Asn	Leu	Leu	Val	Thr	Gly
				110					115					120

Lys	Ile	Val	Asp	His	Gly	Asn	Gly	Thr	Phe	Ser	Val	His	Phe	Gln	125	130	135
His	Asn	Ala	Thr	Gly	Gln	Gly	Asn	Ile	Ser	Ile	Ser	Leu	Val	Pro	140	145	150
Pro	Ser	Lys	Ala	Val	Glu	Phe	His	Gln	Glu	Gln	Gln	Ile	Phe	Ile	155	160	165
Glu	Ala	Lys	Ala	Ser	Lys	Ile	Phe	Asn	Cys	Arg	Met	Glu	Trp	Glu	170	175	180
Lys	Val	Glu	Arg	Gly	Arg	Arg	Thr	Ser	Leu	Cys	Thr	His	Asp	Pro	185	190	195
Ala	Lys	Ile	Cys	Ser	Arg	Asp	His	Ala	Gln	Ser	Ser	Ala	Thr	Trp	200	205	210
Ser	Cys	Ser	Gln	Pro	Phe	Lys	Val	Val	Cys	Val	Tyr	Ile	Ala	Phe	215	220	225
Tyr	Ser	Thr	Asp	Tyr	Arg	Leu	Val	Gln	Lys	Val	Cys	Pro	Asp	Tyr	230	235	240
Asn	Tyr	His	Ser	Asp	Thr	Pro	Tyr	Tyr	Pro	Ser	Gly				245	250	

<210> 93

<211> 902

<212> DNA

<213> Homo Sapien

<400> 93

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<210> 94
 <211> 257
 <212> PRT
 <213> Homo Sapien

<400> 94
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 Asp Asn Lys Asp Gly Pro Thr Gln Lys Tyr Leu Leu Ile Phe Gly
 65 70 75
 Ala Phe Val Ser Val Tyr Ile Gln Glu Met Phe Arg Phe Ala Tyr
 80 85 90
 Tyr Lys Leu Leu Lys Lys Ala Ser Glu Gly Leu Lys Ser Ile Asn
 95 100 105
 Pro Gly Glu Thr Ala Pro Ser Met Arg Leu Leu Ala Tyr Val Ser
 110 115 120
 Gly Leu Gly Phe Gly Ile Met Ser Gly Val Phe Ser Phe Val Asn
 125 130 135
 Thr Leu Ser Asp Ser Leu Gly Pro Gly Thr Val Gly Ile His Gly
 140 145 150
 Asp Ser Pro Gln Phe Phe Leu Tyr Ser Ala Phe Met Thr Leu Val
 155 160 165
 Ile Ile Leu Leu His Val Phe Trp Gly Ile Val Phe Phe Asp Gly
 170 175 180

Cys	Glu	Lys	Lys	Lys	Trp	Gly	Ile	Leu	Leu	Ile	Val	Leu	Leu	Thr
				185					190					195
His	Leu	Leu	Val	Ser	Ala	Gln	Thr	Phe	Ile	Ser	Ser	Tyr	Tyr	Gly
				200					205					210
Ile	Asn	Leu	Ala	Ser	Ala	Phe	Ile	Ile	Leu	Val	Leu	Met	Gly	Thr
				215					220					225
Trp	Ala	Phe	Leu	Ala	Ala	Gly	Gly	Ser	Cys	Arg	Ser	Leu	Lys	Leu
				230					235					240
Cys	Leu	Leu	Cys	Gln	Asp	Lys	Asn	Phe	Leu	Leu	Tyr	Asn	Gln	Arg
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 <211> 1073
 <212> DNA
 <213> Homo Sapien

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 aacctgcttt gggactccct cccacaaaac tggctccgga tcaggggaaca 200
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<210> 96
 <211> 209
 <212> PRT
 <213> Homo Sapien

<400> 96
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 35 40 45
 Gln Val Phe Pro Ser Leu Ser Leu Ile Pro Leu Thr Gln Met Leu
 50 55 60
 Thr Leu Gly Pro Asp Leu His Leu Leu Asn Pro Ala Ala Gly Met
 65 70 75
 Thr Pro Gly Thr Gln Thr His Pro Leu Thr Leu Gly Gly Leu Asn
 80 85 90
 Val Gln Gln Gln Leu His Pro His Val Leu Pro Ile Phe Val Thr
 95 100 105
 Gln Leu Gly Ala Gln Gly Thr Ile Leu Ser Ser Glu Glu Leu Pro
 110 115 120
 Gln Ile Phe Thr Ser Leu Ile Ile His Ser Leu Phe Pro Gly Gly
 125 130 135
 Ile Leu Pro Thr Ser Gln Ala Gly Ala Asn Pro Asp Val Gln Asp
 140 145 150
 Gly Ser Leu Pro Ala Gly Gly Ala Gly Val Asn Pro Ala Thr Gln
 155 160 165
 Gly Thr Pro Ala Gly Arg Leu Pro Thr Pro Ser Gly Thr Asp Asp
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 Asp Phe Ala Val Thr Thr Pro Ala Gly Ile Gln Arg Ser Thr His
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 Ala Ile Glu Glu Ala Thr Thr Glu Ser Ala Asn Gly Ile Gln

<210> 97
 <211> 2848
 <212> DNA
 <213> Homo Sapien

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 <212> PRT
 <213> Homo Sapien

<400> 98
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 35 40 45
 Leu Pro Arg Glu Gly Ala Glu Gly Gln Ile Val Leu Ser Gly Asp
 50 55 60
 Ser Gly Lys Ala Thr Glu Gly Pro Phe Ala Met Asp Pro Asp Ser
 65 70 75
 Gly Phe Leu Leu Val Thr Arg Ala Leu Asp Arg Glu Glu Gln Ala
 80 85 90
 Glu Tyr Gln Leu Gln Val Thr Leu Glu Met Gln Asp Gly His Val
 95 100 105
 Leu Trp Gly Pro Gln Pro Val Leu Val His Val Lys Asp Glu Asn
 110 115 120
 Asp Gln Val Pro His Phe Ser Gln Ala Ile Tyr Arg Ala Arg Leu
 125 130 135
 Ser Arg Gly Thr Arg Pro Gly Ile Pro Phe Leu Phe Leu Glu Ala
 140 145 150
 Ser Asp Arg Asp Glu Pro Gly Thr Ala Asn Ser Asp Leu Arg Phe
 155 160 165
 His Ile Leu Ser Gln Ala Pro Ala Gln Pro Ser Pro Asp Met Phe
 170 175 180
 Gln Leu Glu Pro Arg Leu Gly Ala Leu Ala Leu Ser Pro Lys Gly
 185 190 195
 Ser Thr Ser Leu Asp His Ala Leu Glu Arg Thr Tyr Gln Leu Leu
 200 205 210
 Val Gln Val Lys Asp Met Gly Asp Gln Ala Ser Gly His Gln Ala

	215		220		225
Thr Ala Thr Val	Glu Val Ser Ile Ile	Glu Ser Thr Trp Val	Ser		
	230		235		240
Leu Glu Pro Ile	His Leu Ala Glu Asn	Leu Lys Val Leu Tyr	Pro		
	245		250		255
His His Met Ala	Gln Val His Trp Ser	Gly Gly Asp Val His	Tyr		
	260		265		270
His Leu Glu Ser	His Pro Pro Gly Pro	Phe Glu Val Asn Ala	Glu		
	275		280		285
Gly Asn Leu Tyr	Val Thr Arg Glu Leu	Asp Arg Glu Ala Gln	Ala		
	290		295		300
Glu Tyr Leu Leu	Gln Val Arg Ala Gln	Asn Ser His Gly Glu	Asp		
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Tyr Ala Ala Pro	Leu Glu Leu His Val	Leu Val Met Asp Glu	Asn		
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Asp Asn Val Pro	Ile Cys Pro Pro Arg	Asp Pro Thr Val Ser	Ile		
	335		340		345
Pro Glu Leu Ser	Pro Pro Gly Thr Glu	Val Thr Arg Leu Ser	Ala		
	350		355		360
Glu Asp Ala Asp	Ala Pro Gly Ser Pro	Asn Ser His Val Val	Tyr		
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Gln Leu Leu Ser	Pro Glu Pro Glu Asp	Gly Val Glu Gly Arg	Ala		
	380		385		390
Phe Gln Val Asp	Pro Thr Ser Gly Ser	Val Thr Leu Gly Val	Leu		
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Pro Leu Arg Ala	Gly Gln Asn Ile Leu	Leu Leu Val Leu Ala	Met		
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Asp Leu Ala Gly	Ala Glu Gly Gly Phe	Ser Ser Thr Cys Glu	Val		
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Glu Val Ala Val	Thr Asp Ile Asn Asp	His Ala Pro Glu Phe	Ile		
	440		445		450
Thr Ser Gln Ile	Gly Pro Ile Ser Leu	Pro Glu Asp Val Glu	Pro		
	455		460		465
Gly Thr Leu Val	Ala Met Leu Thr Ala	Ile Asp Ala Asp Leu	Glu		
	470		475		480
Pro Ala Phe Arg	Leu Met Asp Phe Ala	Ile Glu Arg Gly Asp	Thr		
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Glu Gly Thr Phe	Gly Leu Asp Trp Glu	Pro Asp Ser Gly His	Val		

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Pro	Gly	Pro	Gly	Pro	Gly	Ala	Thr	Ala	Thr	Val	Thr	Val	Leu	Val
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Glu	Arg	Val	Met	Pro	Pro	Pro	Lys	Leu	Asp	Gln	Glu	Ser	Tyr	Glu
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Ile	Gln	Pro	Ser	Asp	Pro	Ile	Ser	Arg	Thr	Leu	Arg	Phe	Ser	Leu
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Glu	Val	His	Thr	Ala	Gln	Ser	Leu	Gln	Gly	Ala	Gln	Pro	Gly	Asp
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Thr	Tyr	Thr	Val	Leu	Val	Glu	Ala	Gln	Asp	Thr	Ala	Leu	Thr	Leu
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Ala	Pro	Val	Pro	Ser	Gln	Tyr	Leu	Cys	Thr	Pro	Arg	Gln	Asp	His
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Gly	Leu	Ile	Val	Ser	Gly	Pro	Ser	Lys	Asp	Pro	Asp	Leu	Ala	Ser
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Gly	His	Gly	Pro	Tyr	Ser	Phe	Thr	Leu	Gly	Pro	Asn	Pro	Thr	Val
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Gln	Arg	Asp	Trp	Arg	Leu	Gln	Thr	Leu	Asn	Gly	Ser	His	Ala	Tyr
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Leu	Thr	Leu	Ala	Leu	His	Trp	Val	Glu	Pro	Arg	Glu	His	Ile	Ile
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Pro	Val	Val	Val	Ser	His	Asn	Ala	Gln	Met	Trp	Gln	Leu	Leu	Val
				725					730					735
Arg	Val	Ile	Val	Cys	Arg	Cys	Asn	Val	Glu	Gly	Gln	Cys	Met	Arg
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Lys	Val	Gly	Arg	Met	Lys	Gly	Met	Pro	Thr	Lys	Leu	Ser	Ala	Val
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Gly	Ile	Leu	Val	Gly	Thr	Leu	Val	Ala	Ile	Gly	Ile	Phe	Leu	Ile
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Leu	Ile	Phe	Thr	His	Trp	Thr	Met	Ser	Arg	Lys	Lys	Asp	Pro	Asp

785

790

795

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<210> 99

<211> 2436

<212> DNA

<213> Homo Sapien

<400> 99

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 <212> PRT
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<400> 100

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Thr	Asn	Ser	Gly	Ser	Ser	Val	Thr	Ser	Ser	Gly	Val	Ser	Thr	Ala
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Thr	Asn	Ser	Glu	Phe	His	Thr	Thr	Ser	Ser	Gly	Ile	Ser	Thr	Ala
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Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala
				110					115					120
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Pro	Ser	Ser	Gly	Ala	Ser	Thr	Val
				125					130					135
Thr	Asn	Ser	Gly	Ser	Ser	Val	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala
				140					145					150
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Arg	Ala	Ser	Thr	Ala
				155					160					165
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Leu	Ser	Ser	Gly	Ala	Ser	Thr	Ala
				170					175					180
Thr	Asn	Ser	Asp	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala
				185					190					195
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala
				200					205					210
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Arg	Ala	Ser	Thr	Ala
				215					220					225
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala
				230					235					240
Thr	Asn	Ser	Glu	Ser	Arg	Thr	Thr	Ser	Asn	Gly	Ala	Gly	Thr	Ala
				245					250					255
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala
				260					265					270
Thr	Asn	Ser	Asp	Ser	Ser	Thr	Val	Ser	Ser	Gly	Ala	Ser	Thr	Ala
				275					280					285

Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	
				290					295					300	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	
				305					310					315	
Thr	Asn	Ser	Asp	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Gly	Thr	Ala	
				320					325					330	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Gly	Ile	Ser	Thr	Val	
				335					340					345	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Pro	Ser	Ser	Gly	Ala	Asn	Thr	Ala	
				350					355					360	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Asn	Thr	Ala	
				365					370					375	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Gly	Ala	Ser	Thr	Ala	
				380					385					390	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Val	Ser	Thr	Ala	
				395					400					405	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Ser	Thr	Ala	
				410					415					420	
Thr	Asn	Ser	Asp	Ser	Ser	Thr	Thr	Ser	Ser	Glu	Ala	Ser	Thr	Ala	
				425					430					435	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Val	Ser	Ser	Gly	Ile	Ser	Thr	Val	
				440					445					450	
Thr	Asn	Ser	Glu	Ser	Ser	Thr	Thr	Ser	Ser	Gly	Ala	Asn	Thr	Ala	
				455					460					465	
Thr	Asn	Ser	Gly	Ser	Ser	Val	Thr	Ser	Ala	Gly	Ser	Gly	Thr	Ala	
				470					475					480	
Ala	Leu	Thr	Gly	Met	His	Thr	Thr	Ser	His	Ser	Ala	Ser	Thr	Ala	
				485					490					495	
Val	Ser	Glu	Ala	Lys	Pro	Gly	Gly	Ser	Leu	Val	Pro	Trp	Glu	Ile	
				500					505					510	
Phe	Leu	Ile	Thr	Leu	Val	Ser	Val	Val	Ala	Ala	Val	Gly	Leu	Phe	
				515					520					525	
Ala	Gly	Leu	Phe	Phe	Cys	Val	Arg	Asn	Ser	Leu	Ser	Leu	Arg	Asn	
				530					535					540	
Thr	Phe	Asn	Thr	Ala	Val	Tyr	His	Pro	His	Gly	Leu	Asn	His	Gly	
				545					550					555	
Leu	Gly	Pro	Gly	Pro	Gly	Gly	Asn	His	Gly	Ala	Pro	His	Arg	Pro	
				560					565					570	

Arg Trp Ser Pro Asn Trp Phe Trp Arg Arg Pro Val Ser Ser Ile
575 580 585

Ala Met Glu Met Ser Gly Arg Asn Ser Gly Pro
590 595

<210> 101
<211> 1728
<212> DNA
<213> Homo Sapien

<400> 101
ggccggacgc ctccgcgtta cgggatgaat taacggcggg ttccgcacgg 50
aggttgtgac ccctacggag cccagcttg cccacgcacc ccactcggcg 100
tcgcgcggcg tgccctgctt gtcacaggtg ggaggctgga actatcaggc 150
tgaaaaacag agtgggtact ctcttctggg aagctggcaa caaatggatg 200
atgtgatata tgcattccag gggaaggga attgtggtgc ttctgaaccc 250
atggtcaatt aacgaggcag tttctagcta ctgcacgtac ttcataaagc 300
aggactctaa aagctttgga atcatggtgt catggaaagg gatttacttt 350
atactgactc tgttttgggg aagctttttt ggaagcattt tcatgctgag 400
tcccttttta cctttgatgt ttgtaaaccc atcttggtat cgctggatca 450
acaaccgcct tgtggcaaca tggctcacc tacctgtggc attattggag 500
accatgtttg gtgtaaaagt gattataact ggggatgcat ttgttcctgg 550
agaaagaagt gtcattatca tgaaccatcg gacaagaatg gactggatgt 600
tcctgtggaa ttgcctgatg cgatatagct acctcagatt ggagaaaatt 650
tgctcaaaag cgagtctcaa aggtgttctt ggatttggtt gggccatgca 700
ggctgctgcc tatatcttca ttcataggaa atggaaggat gacaagagcc 750
atttcgaaga catgattgat tacttttgtg atattcacga accacttcaa 800
ctcctcatat tcccagaagg gactgatctc acagaaaaca gcaagtctcg 850
aagtaatgca tttgctgaaa aaaatggact tcagaaatat gaatatgttt 900
tacatccaag aactacaggc tttacttttg tggtagaccg tctaagagaa 950
ggtaagaacc ttgatgctgt ccatgatatc actgtggcgt atcctcacia 1000
cattcctcaa tcagagaagc acctcctcca aggagacttt ccagggaaa 1050
tccactttca cgtccaccgg tatccaatag acaccctccc cacatccaag 1100
gaggaccttc aactctggtg ccacaaacgg tgggaagaga aagaagagag 1150

gctgcgttcc ttctatcaag gggagaagaa tttttatattt accggacaga 1200
gtgtcattcc accttgcaag tctgaactca gggtccttgt ggtcaaattg 1250
ctctctatac tgtattggac cctgttcagc cctgcaatgt gcctactcat 1300
atatttgtac agtcttggtta agtgggtatatt tataatcacc attgtaattct 1350
ttgtgctgca agagagaata tttgggtggac tggagatcat agaacttgca 1400
tgttaccgac ttttacacaa acagccacat tttaaattcaa agaaaaatga 1450
gtaagattat aagggtttgcc atgtgaaaac ctagagcata ttttggaat 1500
gttctaaacc tttctaagct cagatgcatt tttgcatgac tatgtcgaat 1550
atattcttact gccatcatta tttgttaaag atatttttgca cttaattttg 1600
tgggaaaaat attgctacaa ttttttttaa tctctgaatg taatttcgat 1650
actgtgtaca tagcagggag tgatcgggggt gaaataactt gggccagaat 1700
attattaaac aatcatcagg cttttaaa 1728

<210> 102
<211> 414
<212> PRT
<213> Homo Sapien

<400> 102
Met His Ser Arg Gly Arg Glu Ile Val Val Leu Leu Asn Pro Trp
1 5 10 15
Ser Ile Asn Glu Ala Val Ser Ser Tyr Cys Thr Tyr Phe Ile Lys
20 25 30
Gln Asp Ser Lys Ser Phe Gly Ile Met Val Ser Trp Lys Gly Ile
35 40 45
Tyr Phe Ile Leu Thr Leu Phe Trp Gly Ser Phe Phe Gly Ser Ile
50 55 60
Phe Met Leu Ser Pro Phe Leu Pro Leu Met Phe Val Asn Pro Ser
65 70 75
Trp Tyr Arg Trp Ile Asn Asn Arg Leu Val Ala Thr Trp Leu Thr
80 85 90
Leu Pro Val Ala Leu Leu Glu Thr Met Phe Gly Val Lys Val Ile
95 100 105
Ile Thr Gly Asp Ala Phe Val Pro Gly Glu Arg Ser Val Ile Ile
110 115 120
Met Asn His Arg Thr Arg Met Asp Trp Met Phe Leu Trp Asn Cys
125 130 135

Leu Met Arg Tyr Ser Tyr Leu Arg Leu Glu Lys Ile Cys Leu Lys	140	145	150
Ala Ser Leu Lys Gly Val Pro Gly Phe Gly Trp Ala Met Gln Ala	155	160	165
Ala Ala Tyr Ile Phe Ile His Arg Lys Trp Lys Asp Asp Lys Ser	170	175	180
His Phe Glu Asp Met Ile Asp Tyr Phe Cys Asp Ile His Glu Pro	185	190	195
Leu Gln Leu Leu Ile Phe Pro Glu Gly Thr Asp Leu Thr Glu Asn	200	205	210
Ser Lys Ser Arg Ser Asn Ala Phe Ala Glu Lys Asn Gly Leu Gln	215	220	225
Lys Tyr Glu Tyr Val Leu His Pro Arg Thr Thr Gly Phe Thr Phe	230	235	240
Val Val Asp Arg Leu Arg Glu Gly Lys Asn Leu Asp Ala Val His	245	250	255
Asp Ile Thr Val Ala Tyr Pro His Asn Ile Pro Gln Ser Glu Lys	260	265	270
His Leu Leu Gln Gly Asp Phe Pro Arg Glu Ile His Phe His Val	275	280	285
His Arg Tyr Pro Ile Asp Thr Leu Pro Thr Ser Lys Glu Asp Leu	290	295	300
Gln Leu Trp Cys His Lys Arg Trp Glu Glu Lys Glu Glu Arg Leu	305	310	315
Arg Ser Phe Tyr Gln Gly Glu Lys Asn Phe Tyr Phe Thr Gly Gln	320	325	330
Ser Val Ile Pro Pro Cys Lys Ser Glu Leu Arg Val Leu Val Val	335	340	345
Lys Leu Leu Ser Ile Leu Tyr Trp Thr Leu Phe Ser Pro Ala Met	350	355	360
Cys Leu Leu Ile Tyr Leu Tyr Ser Leu Val Lys Trp Tyr Phe Ile	365	370	375
Ile Thr Ile Val Ile Phe Val Leu Gln Glu Arg Ile Phe Gly Gly	380	385	390
Leu Glu Ile Ile Glu Leu Ala Cys Tyr Arg Leu Leu His Lys Gln	395	400	405
Pro His Leu Asn Ser Lys Lys Asn Glu	410		

<210> 103
<211> 2403
<212> DNA
<213> Homo Sapien

<400> 103
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acagctggcc tgacctccaa atcatccatc cacccttget gtcattctgtt 100
ttcatagtgt gagatcaacc cacaggaata tccatggctt ttgtgctcat 150
tttggttctc agtttctacg agctgggtgc aggacagtgg caagtcactg 200
gaccgggcaa gtttgtccag gccttgggtgg gggaggacgc cgtgttctcc 250
tgctccctct ttcctgagac cagtgcagag gctatggaag tgcggttctt 300
caggaatcag ttccatgctg tggccacct ctacagagat ggggaagact 350
gggaatctaa gcagatgcca cagtatcgag ggagaactga gtttgtgaag 400
gactccattg cagggggggc tgtctctcta aggctaaaaa acatcactcc 450
ctcggacatc ggctgtatg ggtgctgggt cagttcccag atttacgatg 500
aggaggccac ctgggagctg cgggtggcag cactgggctc acttctctc 550
atttccatcg tgggatatgt tgacggaggt atccagttac tctgcctgtc 600
ctcaggctgg tccccccagc ccacagccaa gtggaaaggt ccacaaggac 650
aggatttgtc ttcagactcc agagcaaagt cagatgggta cagcctgtat 700
gatgtggaga tctccattat agtccaggaa aatgctggga gcatattgtg 750
ttccatccac cttgctgagc agagtcatga ggtggaatcc aaggtattga 800
taggagagac gtttttccag cctcacctt ggcgcctggc ttctatttta 850
ctcgggttac tctgtggtgc cctgtgtggt gttgtcatgg ggatgataat 900
tgttttcttc aaatccaaag ggaaaatcca ggcggaactg gactggagaa 950
gaaagcacgg acaggcagaa ttgagagacg cccggaaaca cgcagtggag 1000
gtgactctgg atccagagac ggctcaccgc aagctctgcg tttctgatct 1050
gaaaactgta acccatagaa aagctcccca ggagggtgct cactctgaga 1100
agagatttac aaggaagagt gtggtggctt ctcagggttt ccaagcaggg 1150
agacattact gggagggtga cgtgggacaa aatgtagggt ggtatgtggg 1200
agtgtgtcgg gatgacgtag acagggggaa gaacaatgtg actttgtctc 1250
ccaacaatgg gtattgggtc ctcagactga caacagaaca tttgtatttc 1300

acattcaatc cccattttat cagcctcccc cccagcacc ctcctacacg 1350
 agtaggggtc ttcctggact atgagggtgg gaccatctcc ttcttcaata 1400
 caaatgacca gtcccttatt tataccctgc tgacatgtca gtttgaaggc 1450
 ttgttgagac cctatatcca gcatgcatg tatgacgagg aaaaggggac 1500
 tcccatattc atatgtccag tgcctgggg atgagacaga gaagaccctg 1550
 cttaaagggc cccacaccac agaccagac acagccaagg gagagtgtc 1600
 ccgacaggtg gccccagctt cctctccgga gcctgcatc agagagtcac 1650
 gccccccact ctcctttagg gagctgaggt tcttctgccc tgagccctgc 1700
 agcagcggca gtcacagctt ccagatgagg ggggattggc ctgaccctgt 1750
 gggagtcaga agccatggct gccctgaagt ggggacggaa tagactcaca 1800
 ttaggtttag tttgtgaaaa ctccatccag ctaagcgatc ttgaacaagt 1850
 cacaacctcc caggctctc atttgctagt cacggacagt gattcctgcc 1900
 tcacaggtga agattaaaga gacaacgaat gtgaatcatg cttgcagggt 1950
 tgagggcaca gtgtttgcta atgatgtgtt tttatattat acattttccc 2000
 accataaact ctgtttgctt attccacatt aatttacttt tctctatacc 2050
 aaatcaccca tggaatagtt attgaacacc tgctttgtga ggctcaaaga 2100
 ataaagagga ggtaggattt ttcactgatt ctataagccc agcattacct 2150
 gataccaaaa ccaggcaaag aaaacagaag aagaggaagg aaaactacag 2200
 gtccatatcc ctcatataca cagacacaaa aattctaaat aaaattttta 2250
 caaattaaac taaacaatat atttaaagat gatataaac tactcagtgt 2300
 ggtttgtccc acaaatgcag agttggttta atatttaa atcaaccagt 2350
 gtaattcagc acattaataa agtaaaaaag aaaaccataa aaaaaaaaaa 2400
 aaa 2403

<210> 104

<211> 466

<212> PRT

<213> Homo Sapien

<400> 104

Met	Ala	Phe	Val	Leu	Ile	Leu	Val	Leu	Ser	Phe	Tyr	Glu	Leu	Val
1				5				10					15	

Ser Gly Gln Trp Gln Val Thr Gly Pro Gly Lys Phe Val Gln Ala

	20	25	30
Leu Val Gly Glu Asp Ala Val Phe Ser Cys Ser Leu Phe Pro Glu	35	40	45
Thr Ser Ala Glu Ala Met Glu Val Arg Phe Phe Arg Asn Gln Phe	50	55	60
His Ala Val Val His Leu Tyr Arg Asp Gly Glu Asp Trp Glu Ser	65	70	75
Lys Gln Met Pro Gln Tyr Arg Gly Arg Thr Glu Phe Val Lys Asp	80	85	90
Ser Ile Ala Gly Gly Arg Val Ser Leu Arg Leu Lys Asn Ile Thr	95	100	105
Pro Ser Asp Ile Gly Leu Tyr Gly Cys Trp Phe Ser Ser Gln Ile	110	115	120
Tyr Asp Glu Glu Ala Thr Trp Glu Leu Arg Val Ala Ala Leu Gly	125	130	135
Ser Leu Pro Leu Ile Ser Ile Val Gly Tyr Val Asp Gly Gly Ile	140	145	150
Gln Leu Leu Cys Leu Ser Ser Gly Trp Phe Pro Gln Pro Thr Ala	155	160	165
Lys Trp Lys Gly Pro Gln Gly Gln Asp Leu Ser Ser Asp Ser Arg	170	175	180
Ala Asn Ala Asp Gly Tyr Ser Leu Tyr Asp Val Glu Ile Ser Ile	185	190	195
Ile Val Gln Glu Asn Ala Gly Ser Ile Leu Cys Ser Ile His Leu	200	205	210
Ala Glu Gln Ser His Glu Val Glu Ser Lys Val Leu Ile Gly Glu	215	220	225
Thr Phe Phe Gln Pro Ser Pro Trp Arg Leu Ala Ser Ile Leu Leu	230	235	240
Gly Leu Leu Cys Gly Ala Leu Cys Gly Val Val Met Gly Met Ile	245	250	255
Ile Val Phe Phe Lys Ser Lys Gly Lys Ile Gln Ala Glu Leu Asp	260	265	270
Trp Arg Arg Lys His Gly Gln Ala Glu Leu Arg Asp Ala Arg Lys	275	280	285
His Ala Val Glu Val Thr Leu Asp Pro Glu Thr Ala His Pro Lys	290	295	300
Leu Cys Val Ser Asp Leu Lys Thr Val Thr His Arg Lys Ala Pro			

	305		310		315
Gln Glu Val Pro His Ser Glu Lys Arg Phe Thr Arg Lys Ser Val					
	320		325		330
Val Ala Ser Gln Gly Phe Gln Ala Gly Arg His Tyr Trp Glu Val					
	335		340		345
Asp Val Gly Gln Asn Val Gly Trp Tyr Val Gly Val Cys Arg Asp					
	350		355		360
Asp Val Asp Arg Gly Lys Asn Asn Val Thr Leu Ser Pro Asn Asn					
	365		370		375
Gly Tyr Trp Val Leu Arg Leu Thr Thr Glu His Leu Tyr Phe Thr					
	380		385		390
Phe Asn Pro His Phe Ile Ser Leu Pro Pro Ser Thr Pro Pro Thr					
	395		400		405
Arg Val Gly Val Phe Leu Asp Tyr Glu Gly Gly Thr Ile Ser Phe					
	410		415		420
Phe Asn Thr Asn Asp Gln Ser Leu Ile Tyr Thr Leu Leu Thr Cys					
	425		430		435
Gln Phe Glu Gly Leu Leu Arg Pro Tyr Ile Gln His Ala Met Tyr					
	440		445		450
Asp Glu Glu Lys Gly Thr Pro Ile Phe Ile Cys Pro Val Ser Trp					
	455		460		465

Gly

<210> 105

<211> 2103

<212> DNA

<213> Homo Sapien

<400> 105

ccttcacagg actcttcatt gctggttggc aatgatgtat cggccagatg 50

tggtgagggc taggaaaaga gtttggtggg aaccctgggt tatcggcctc 100

gtcatcttca tatccctgat tgtcctggca gtgtgcattg gactcactgt 150

tcattatgtg agatataatc aaaagaagac ctacaattac tatagcacat 200

tgtcatttac aactgacaaa ctatatgctg agtttggcag agaggcttct 250

aacaatttta cagaaatgag ccagagactt gaatcaatgg tgaaaaatgc 300

atattataaa tctccattaa gggaagaatt tgtcaagtct cagggttatca 350

agttcagtca acagaagcat ggagtgttgg ctcatatgct gttgatttgt 400

agatttcact ctactgagga tcctgaaact gtagataaaa ttgttcaact 450

tgttttacat gaaaagctgc aagatgctgt aggaccccct aaagtagatc 500
 ctactcagt taaaattaaa aaaatcaaca agacagaaac agacagctat 550
 ctaaaccatt gctgcggaac acgaagaagt aaaactctag gtcagagtct 600
 caggatcgtt ggtgggacag aagtagaaga gggatgaatgg ccctggcagg 650
 ctagcctgca gtgggatggg agtcactcgt gtggagcaac cttaattaat 700
 gccacatggc ttgtgagtgc tgctcactgt ttacaacat ataagaacct 750
 tgccagatgg actgcttcct ttggagtaac aataaacct tcgaaaatga 800
 aacggggtct ccggagaata attgtccatg aaaaatacaa acacccatca 850
 catgactatg atatttctct tgcagagctt tctagccctg ttccctacac 900
 aatgcagta catagagttt gtctccctga tgcactctat gagtttcaac 950
 caggatgatgt gatgtttgtg acaggatttg gagcactgaa aatgatggg 1000
 tacagtcaaa atcatcttcg acaagcacag gtgactctca tagacgctac 1050
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 tatgtgctgg ctcccttagaa ggaaaaacag atgcatgcca gggatgactct 1150
 ggaggaccac tgggttagttc agatgctaga gatattctgg accttgctgg 1200
 aatagtgagc tggggagatg aatgtgcgaa acccaacaag cctgggtgtt 1250
 atactagagt tacggccttg cgggactgga ttacttcaaa aactgggtatc 1300
 taagagacaa aagcctcatg gaacagataa cttttttttt tgtttttttg 1350
 gtgtggaggc cttttttaga gatacagaat tggagaagac ttgcaaaaca 1400
 gctagatttg actgatctca ataaactgtt tgcttgatgc atgtattttc 1450
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 tgtcatctgt gagcaatagt tgaaacttta tgtacataga gaaatagata 1550
 atacaatatt acattacagc ctgtattcat ttgttctcta gaagttttgt 1600
 cagaattttg acttggtgac ataaatttgt aatgcatata tacaatttga 1650
 agcactcctt ttcttcagtt cctcagctcc tctcatttca gcaaatatcc 1700
 attttcaagg tgcagaacaa ggagtgaag aaaatataag aagaaaaaaa 1750
 tcccctacat ttatttggca cagaaaagta ttaggtgttt ttcttagtgg 1800
 aatattagaa atgatcatat tcattatgaa aggtcaagca aagacagcag 1850
 aataccaatc acttcatcat ttaggaagta tgggaactaa gttaaggaag 1900

tccagaaaga agccaagata tatccttatt ttcatttcca aacaactact 1950
atgataaatg tgaagaagat tctgtttttt tgtgacctat aataattata 2000
caaacttcat gcaatgtact tggtctaagc aaattaaagc aaatatttat 2050
ttaacattgt tactgaggat gtcaacatat aacaataaaa tataaatcac 2100
cca 2103

<210> 106
<211> 423
<212> PRT
<213> Homo Sapien

<400> 106
Met Met Tyr Arg Pro Asp Val Val Arg Ala Arg Lys Arg Val Cys
1 5 10 15
Trp Glu Pro Trp Val Ile Gly Leu Val Ile Phe Ile Ser Leu Ile
20 25 30
Val Leu Ala Val Cys Ile Gly Leu Thr Val His Tyr Val Arg Tyr
35 40 45
Asn Gln Lys Lys Thr Tyr Asn Tyr Tyr Ser Thr Leu Ser Phe Thr
50 55 60
Thr Asp Lys Leu Tyr Ala Glu Phe Gly Arg Glu Ala Ser Asn Asn
65 70 75
Phe Thr Glu Met Ser Gln Arg Leu Glu Ser Met Val Lys Asn Ala
80 85 90
Phe Tyr Lys Ser Pro Leu Arg Glu Glu Phe Val Lys Ser Gln Val
95 100 105
Ile Lys Phe Ser Gln Gln Lys His Gly Val Leu Ala His Met Leu
110 115 120
Leu Ile Cys Arg Phe His Ser Thr Glu Asp Pro Glu Thr Val Asp
125 130 135
Lys Ile Val Gln Leu Val Leu His Glu Lys Leu Gln Asp Ala Val
140 145 150
Gly Pro Pro Lys Val Asp Pro His Ser Val Lys Ile Lys Lys Ile
155 160 165
Asn Lys Thr Glu Thr Asp Ser Tyr Leu Asn His Cys Cys Gly Thr
170 175 180
Arg Arg Ser Lys Thr Leu Gly Gln Ser Leu Arg Ile Val Gly Gly
185 190 195
Thr Glu Val Glu Glu Gly Glu Trp Pro Trp Gln Ala Ser Leu Gln

	200		205		210
Trp Asp Gly Ser	His Arg Cys Gly Ala	Thr Leu Ile Asn Ala	Thr		
	215		220		225
Trp Leu Val Ser	Ala Ala His Cys Phe	Thr Thr Tyr Lys Asn	Pro		
	230		235		240
Ala Arg Trp Thr	Ala Ser Phe Gly Val	Thr Ile Lys Pro Ser	Lys		
	245		250		255
Met Lys Arg Gly	Leu Arg Arg Ile Ile	Val His Glu Lys Tyr	Lys		
	260		265		270
His Pro Ser His	Asp Tyr Asp Ile Ser	Leu Ala Glu Leu Ser	Ser		
	275		280		285
Pro Val Pro Tyr	Thr Asn Ala Val His	Arg Val Cys Leu Pro	Asp		
	290		295		300
Ala Ser Tyr Glu	Phe Gln Pro Gly Asp	Val Met Phe Val Thr	Gly		
	305		310		315
Phe Gly Ala Leu	Lys Asn Asp Gly Tyr	Ser Gln Asn His Leu	Arg		
	320		325		330
Gln Ala Gln Val	Thr Leu Ile Asp Ala	Thr Thr Cys Asn Glu	Pro		
	335		340		345
Gln Ala Tyr Asn	Asp Ala Ile Thr Pro	Arg Met Leu Cys Ala	Gly		
	350		355		360
Ser Leu Glu Gly	Lys Thr Asp Ala Cys	Gln Gly Asp Ser Gly	Gly		
	365		370		375
Pro Leu Val Ser	Ser Asp Ala Arg Asp	Ile Trp Tyr Leu Ala	Gly		
	380		385		390
Ile Val Ser Trp	Gly Asp Glu Cys Ala	Lys Pro Asn Lys Pro	Gly		
	395		400		405
Val Tyr Thr Arg	Val Thr Ala Leu Arg	Asp Trp Ile Thr Ser	Lys		
	410		415		420

Thr Gly Ile

<210> 107

<211> 2397

<212> DNA

<213> Homo Sapien

<400> 107

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cgaagaagtt ccctgccccg atgagcccc gccgtgcgtc cccgactatc 100

cccaggcggg cgtggggcac cgggcccagc gccgacgac gctgccgttt 150
tgcccttggg agtaggatgt ggtgaaagga tggggcttct cccttacggg 200
gctcacaatg gccagagaag attcogtgaa gtgtctgcgc tgcctgctct 250
acgccctcaa tctgctcttt tggttaatgt ccatcagtgt gttggcagtt 300
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<210> 108
<211> 305
<212> PRT
<213> Homo Sapien

<400> 108
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Val Ser Ala Trp Met Arg Asp Tyr Leu Asn Asn Val Leu Thr Leu
35 40 45
Thr Ala Glu Thr Arg Val Glu Glu Ala Val Ile Leu Thr Tyr Phe
50 55 60
Pro Val Val His Pro Val Met Ile Ala Val Cys Cys Phe Leu Ile
65 70 75
Ile Val Gly Met Leu Gly Tyr Cys Gly Thr Val Lys Arg Asn Leu
80 85 90

Leu	Leu	Leu	Ala	Trp	Tyr	Phe	Gly	Ser	Leu	Leu	Val	Ile	Phe	Cys	
				95					100					105	
Val	Glu	Leu	Ala	Cys	Gly	Val	Trp	Thr	Tyr	Glu	Gln	Glu	Leu	Met	
				110					115					120	
Val	Pro	Val	Gln	Trp	Ser	Asp	Met	Val	Thr	Leu	Lys	Ala	Arg	Met	
				125					130					135	
Thr	Asn	Tyr	Gly	Leu	Pro	Arg	Tyr	Arg	Trp	Leu	Thr	His	Ala	Trp	
				140					145					150	
Asn	Phe	Phe	Gln	Arg	Glu	Phe	Lys	Cys	Cys	Gly	Val	Val	Tyr	Phe	
				155					160					165	
Thr	Asp	Trp	Leu	Glu	Met	Thr	Glu	Met	Asp	Trp	Pro	Pro	Asp	Ser	
				170					175					180	
Cys	Cys	Val	Arg	Glu	Phe	Pro	Gly	Cys	Ser	Lys	Gln	Ala	His	Gln	
				185					190					195	
Glu	Asp	Leu	Ser	Asp	Leu	Tyr	Gln	Glu	Gly	Cys	Gly	Lys	Lys	Met	
				200					205					210	
Tyr	Ser	Phe	Leu	Arg	Gly	Thr	Lys	Gln	Leu	Gln	Val	Leu	Arg	Phe	
				215					220					225	
Leu	Gly	Ile	Ser	Ile	Gly	Val	Thr	Gln	Ile	Leu	Ala	Met	Ile	Leu	
				230					235					240	
Thr	Ile	Thr	Leu	Leu	Trp	Ala	Leu	Tyr	Tyr	Asp	Arg	Arg	Glu	Pro	
				245					250					255	
Gly	Thr	Asp	Gln	Met	Met	Ser	Leu	Lys	Asn	Asp	Asn	Ser	Gln	His	
				260					265					270	
Leu	Ser	Cys	Pro	Ser	Val	Glu	Leu	Leu	Lys	Pro	Ser	Leu	Ser	Arg	
				275					280					285	
Ile	Phe	Glu	His	Thr	Ser	Met	Ala	Asn	Ser	Phe	Asn	Thr	His	Phe	
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Glu	Met	Glu	Glu	Leu											
				305											

<210> 109

<211> 2339

<212> DNA

<213> Homo Sapien

<400> 109

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gaggccttaa aaaaaaaagt gcttgaaaga gaaggggaca aaggaacacc 150

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 ctccattcct gcttctcacc tgcctcttca tcacaggcac ctccgtgtca 250
 cccgtggccc tagatccttg ttctgcttac atcagcctga atgagccctg 300
 gaggaacact gaccaccagt tggatgagtc tcaaggctct cctctatgtg 350
 acaaccatgt gaatggggag tgggtaccact tcacgggcat ggcgggagat 400
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 aacagttact gaaattatga cttaaatacc caatgactcc ttaaataatgt 2250
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<210> 110

<211> 545

<212> PRT

<213> Homo Sapien

<400> 110

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Ser	Val	Ser	Pro	Val	Ala	Leu	Asp	Pro	Cys	Ser	Ala	Tyr	Ile	Ser
				20					25					30

Leu	Asn	Glu	Pro	Trp	Arg	Asn	Thr	Asp	His	Gln	Leu	Asp	Glu	Ser
				35					40					45

Gln	Gly	Pro	Pro	Leu	Cys	Asp	Asn	His	Val	Asn	Gly	Glu	Trp	Tyr
				50					55					60

His	Phe	Thr	Gly	Met	Ala	Gly	Asp	Ala	Met	Pro	Thr	Phe	Cys	Ile
				65					70					75

Pro	Glu	Asn	His	Cys	Gly	Thr	His	Ala	Pro	Val	Trp	Leu	Asn	Gly
				80					85					90

Ser	His	Pro	Leu	Glu	Gly	Asp	Gly	Ile	Val	Gln	Arg	Gln	Ala	Cys
				95					100					105

Ala Ser Phe Asn Gly	Asn Cys Cys Leu Trp	Asn Thr Thr Val Glu
110	115	120
Val Lys Ala Cys Pro Gly Gly Tyr Tyr	Val Tyr Arg Leu Thr Lys	
125	130	135
Pro Ser Val Cys Phe His Val Tyr Cys	Gly His Phe Tyr Asp Ile	
140	145	150
Cys Asp Glu Asp Cys His Gly Ser Cys	Ser Asp Thr Ser Glu Cys	
155	160	165
Thr Cys Ala Pro Gly Thr Val Leu Gly	Pro Asp Arg Gln Thr Cys	
170	175	180
Phe Asp Glu Asn Glu Cys Glu Gln Asn	Asn Gly Gly Cys Ser Glu	
185	190	195
Ile Cys Val Asn Leu Lys Asn Ser Tyr	Arg Cys Glu Cys Gly Val	
200	205	210
Gly Arg Val Leu Arg Ser Asp Gly Lys	Thr Cys Glu Asp Val Glu	
215	220	225
Gly Cys His Asn Asn Asn Gly Gly Cys	Ser His Ser Cys Leu Gly	
230	235	240
Ser Glu Lys Gly Tyr Gln Cys Glu Cys	Pro Arg Gly Leu Val Leu	
245	250	255
Ser Glu Asp Asn His Thr Cys Gln Val	Pro Val Leu Cys Lys Ser	
260	265	270
Asn Ala Ile Glu Val Asn Ile Pro Arg	Glu Leu Val Gly Gly Leu	
275	280	285
Glu Leu Phe Leu Thr Asn Thr Ser Cys	Arg Gly Val Ser Asn Gly	
290	295	300
Thr His Val Asn Ile Leu Phe Ser Leu	Lys Thr Cys Gly Thr Val	
305	310	315
Val Asp Val Val Asn Asp Lys Ile Val	Ala Ser Asn Leu Val Thr	
320	325	330
Gly Leu Pro Lys Gln Thr Pro Gly Ser	Ser Gly Asp Phe Ile Ile	
335	340	345
Arg Thr Ser Lys Leu Leu Ile Pro Val	Thr Cys Glu Phe Pro Arg	
350	355	360
Leu Tyr Thr Ile Ser Glu Gly Tyr Val	Pro Asn Leu Arg Asn Ser	
365	370	375
Pro Leu Glu Ile Met Ser Arg Asn His	Gly Ile Phe Pro Phe Thr	
380	385	390

Leu	Glu	Ile	Phe	Lys	Asp	Asn	Glu	Phe	Glu	Glu	Pro	Tyr	Arg	Glu	
				395					400					405	
Ala	Leu	Pro	Thr	Leu	Lys	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Gly	Ile	
				410					415					420	
Glu	Pro	Val	Val	His	Val	Ser	Gly	Leu	Glu	Ser	Leu	Val	Glu	Ser	
				425					430					435	
Cys	Phe	Ala	Thr	Pro	Thr	Ser	Lys	Ile	Asp	Glu	Val	Leu	Lys	Tyr	
				440					445					450	
Tyr	Leu	Ile	Arg	Asp	Gly	Cys	Val	Ser	Asp	Asp	Ser	Val	Lys	Gln	
				455					460					465	
Tyr	Thr	Ser	Arg	Asp	His	Leu	Ala	Lys	His	Phe	Gln	Val	Pro	Val	
				470					475					480	
Phe	Lys	Phe	Val	Gly	Lys	Asp	His	Lys	Glu	Val	Phe	Leu	His	Cys	
				485					490					495	
Arg	Val	Leu	Val	Cys	Gly	Val	Leu	Asp	Glu	Arg	Ser	Arg	Cys	Ala	
				500					505					510	
Gln	Gly	Cys	His	Arg	Arg	Met	Arg	Arg	Gly	Ala	Gly	Gly	Glu	Asp	
				515					520					525	
Ser	Ala	Gly	Leu	Gln	Gly	Gln	Thr	Leu	Thr	Gly	Gly	Pro	Ile	Arg	
				530					535					540	
Ile	Asp	Trp	Glu	Asp											
				545											

<210> 111
 <211> 2063
 <212> DNA
 <213> Homo Sapien

<400> 111
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 agagccagca tgttacagga tcctgacagt gatcaacctc tgaacagcct 250
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 aggtggggat ccccatcatc atagcactac tgagcctggc gagtatcatc 350
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 aactttccca cactactgaa tggaagcagg ctgtcttgta aaagcccaga 1850
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<210> 112
<211> 432
<212> PRT
<213> Homo Sapien

<400> 112
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Val Lys Pro Leu Arg Lys Pro Arg Ile Pro Met Glu Thr Phe Arg
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Lys Val Gly Ile Pro Ile Ile Ile Ala Leu Leu Ser Leu Ala Ser
35 40 45
Ile Ile Ile Val Val Val Leu Ile Lys Val Ile Leu Asp Lys Tyr
50 55 60
Tyr Phe Leu Cys Gly Gln Pro Leu His Phe Ile Pro Arg Lys Gln
65 70 75
Leu Cys Asp Gly Glu Leu Asp Cys Pro Leu Gly Glu Asp Glu Glu
80 85 90
His Cys Val Lys Ser Phe Pro Glu Gly Pro Ala Val Ala Val Arg
95 100 105
Leu Ser Lys Asp Arg Ser Thr Leu Gln Val Leu Asp Ser Ala Thr
110 115 120
Gly Asn Trp Phe Ser Ala Cys Phe Asp Asn Phe Thr Glu Ala Leu
125 130 135
Ala Glu Thr Ala Cys Arg Gln Met Gly Tyr Ser Arg Ala Val Glu
140 145 150
Ile Gly Pro Asp Gln Asp Leu Asp Val Val Glu Ile Thr Glu Asn
155 160 165
Ser Gln Glu Leu Arg Met Arg Asn Ser Ser Gly Pro Cys Leu Ser
170 175 180
Gly Ser Leu Val Ser Leu His Cys Leu Ala Cys Gly Lys Ser Leu
185 190 195
Lys Thr Pro Arg Val Val Gly Gly Glu Glu Ala Ser Val Asp Ser
200 205 210

Trp	Pro	Trp	Gln	Val	Ser	Ile	Gln	Tyr	Asp	Lys	Gln	His	Val	Cys	
				215					220					225	
Gly	Gly	Ser	Ile	Leu	Asp	Pro	His	Trp	Val	Leu	Thr	Ala	Ala	His	
				230					235					240	
Cys	Phe	Arg	Lys	His	Thr	Asp	Val	Phe	Asn	Trp	Lys	Val	Arg	Ala	
				245					250					255	
Gly	Ser	Asp	Lys	Leu	Gly	Ser	Phe	Pro	Ser	Leu	Ala	Val	Ala	Lys	
				260					265					270	
Ile	Ile	Ile	Ile	Glu	Phe	Asn	Pro	Met	Tyr	Pro	Lys	Asp	Asn	Asp	
				275					280					285	
Ile	Ala	Leu	Met	Lys	Leu	Gln	Phe	Pro	Leu	Thr	Phe	Ser	Gly	Thr	
				290					295					300	
Val	Arg	Pro	Ile	Cys	Leu	Pro	Phe	Phe	Asp	Glu	Glu	Leu	Thr	Pro	
				305					310					315	
Ala	Thr	Pro	Leu	Trp	Ile	Ile	Gly	Trp	Gly	Phe	Thr	Lys	Gln	Asn	
				320					325					330	
Gly	Gly	Lys	Met	Ser	Asp	Ile	Leu	Leu	Gln	Ala	Ser	Val	Gln	Val	
				335					340					345	
Ile	Asp	Ser	Thr	Arg	Cys	Asn	Ala	Asp	Asp	Ala	Tyr	Gln	Gly	Glu	
				350					355					360	
Val	Thr	Glu	Lys	Met	Met	Cys	Ala	Gly	Ile	Pro	Glu	Gly	Gly	Val	
				365					370					375	
Asp	Thr	Cys	Gln	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Met	Tyr	Gln	Ser	
				380					385					390	
Asp	Gln	Trp	His	Val	Val	Gly	Ile	Val	Ser	Trp	Gly	Tyr	Gly	Cys	
				395					400					405	
Gly	Gly	Pro	Ser	Thr	Pro	Gly	Val	Tyr	Thr	Lys	Val	Ser	Ala	Tyr	
				410					415					420	
Leu	Asn	Trp	Ile	Tyr	Asn	Val	Trp	Lys	Ala	Glu	Leu				
				425					430						

<210> 113

<211> 1768

<212> DNA

<213> Homo Sapien

<400> 113

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 ccagccaggg gcagccgtct gggaaggagc aagcaaagt accatttctc 1100
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 cagcaaggcc tgagagctga tcagaagggc ctgctgtgcg aacacggaaa 1250
 tgctccagt aagcacaggc tgcaaaatcc ccaggcaaag gactgtgtgg 1300
 ctcaatttaa atcatgttct agtaattgga gctgtcccca agaccaaagg 1350
 agctagagct tggttcaa atgatctccaa ggcccttata cccaggaga 1400
 ctttgatttg aatttgaaac cccaaatcca aacctaagaa ccagggtgat 1450
 taagaatcag ttattgccgg gtgtgggtgg ctgtaatgcc aacatttttg 1500
 gaggccgagg cgggtagatc acctgaggtc aggagttcaa gaccagcctg 1550
 gccaatgg tgaaaccct gtctctacta aaaatacaaa aaaactagcc 1600

agggcatggtg gtgtgtgcct gtatcccagc tactcgggag gctgagacag 1650
 gagaattact tgaacctggg aggtgaagga ggctgagaca ggagaatcac 1700
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 aattatggtt atttgtaa 1768

<210> 114
 <211> 109
 <212> PRT
 <213> Homo Sapien

<400> 114
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 Val Phe Cys Ser Leu Val Thr Ser Leu Tyr Leu Pro Asn Thr Glu
 20 25 30
 Asp Leu Ser Leu Trp Leu Trp Pro Lys Pro Asp Leu His Ser Gly
 35 40 45
 Thr Arg Thr Glu Val Ser Thr His Thr Val Pro Ser Lys Pro Gly
 50 55 60
 Thr Ala Ser Pro Cys Trp Pro Leu Ala Gly Ala Val Pro Ser Pro
 65 70 75
 Thr Val Ser Arg Leu Glu Ala Leu Thr Arg Ala Val Gln Val Ala
 80 85 90
 Glu Pro Leu Gly Ser Cys Gly Phe Gln Gly Gly Pro Cys Pro Gly
 95 100 105
 Arg Arg Arg Asp

<210> 115
 <211> 1197
 <212> DNA
 <213> Homo Sapien

<400> 115
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 gagagaccat ggcaaagaat cctccagaga attgtgaaga ctgtcacatt 100
 ctaaatgcag aagcttttaa atccaagaaa atatgtaaat cacttaagat 150
 ttgtggactg gtgttttgta tcttgccct aactctaatt gtctgtttt 200
 gggggagcaa gcacttctgg ccggaggtac ccaaaaaagc ctatgacatg 250
 gagcacactt tctacagcaa tggagagaag aagaagattt acatggaaat 300
 tgatcctgtg accagaactg aaatattcag aagcggaaat ggcactgatg 350

aaacattgga agtgcacgac tttaaaaacg gatacactgg catctacttc 400
 gtgggtcttc aaaaatgttt tatcaaaact cagattaaag tgattcctga 450
 attttctgaa ccagaagagg aaatagatga gaatgaagaa attaccacaa 500
 ctttctttga acagtcagtg atttgggtcc cagcagaaaa gcctattgaa 550
 aaccgagatt ttcttaaaaa ttccaaaatt ctggagattt gtgataacgt 600
 gaccatgtat tggatcaatc cactctaat atcagtttct gagttacaag 650
 actttgagga ggagggagaa gatcttcact ttcttgccaa cgaaaaaaaa 700
 gggattgaac aaaatgaaca gtgggtgggc cctcaagtga aagtagagaa 750
 gacccgtcac gccagacaag caagtgagga agaacttcca ataaatgact 800
 atactgaaaa tggaatagaa tttgatccca tgctggatga gagagggttat 850
 tgttgtatatt actgccgtcg aggcaaccgc tattgccgcc gcgtctgtga 900
 acctttacta ggctactacc catatccata ctgctaccaa ggaggacgag 950
 tcatctgtcg tgtcatcatg ccttgtaact ggtgggtggc ccgcatgctg 1000
 gggaggggtct aataggaggt ttgagctcaa atgcttaaac tgctggcaac 1050
 atataataaa tgcattgctat tcaatgaatt tctgcctatg aggcattctgg 1100
 cccctggtag ccagctctcc agaattactt gtaggtaatt cctctcttca 1150
 tgttctaata aacttctaca ttatcaccaa aaaaaaaaaa aaaaaaa 1197

<210> 116

<211> 317

<212> PRT

<213> Homo Sapien

<400> 116

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Asn	Ala	Glu	Ala	Phe	Lys	Ser	Lys	Lys	Ile	Cys	Lys	Ser	Leu	Lys
				20					25					30

Ile	Cys	Gly	Leu	Val	Phe	Gly	Ile	Leu	Ala	Leu	Thr	Leu	Ile	Val
				35					40					45

Leu	Phe	Trp	Gly	Ser	Lys	His	Phe	Trp	Pro	Glu	Val	Pro	Lys	Lys
				50					55					60

Ala	Tyr	Asp	Met	Glu	His	Thr	Phe	Tyr	Ser	Asn	Gly	Glu	Lys	Lys
				65					70					75

Lys	Ile	Tyr	Met	Glu	Ile	Asp	Pro	Val	Thr	Arg	Thr	Glu	Ile	Phe
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

80					85					90				
Arg	Ser	Gly	Asn	Gly	Thr	Asp	Glu	Thr	Leu	Glu	Val	His	Asp	Phe
				95					100					105
Lys	Asn	Gly	Tyr	Thr	Gly	Ile	Tyr	Phe	Val	Gly	Leu	Gln	Lys	Cys
				110					115					120
Phe	Ile	Lys	Thr	Gln	Ile	Lys	Val	Ile	Pro	Glu	Phe	Ser	Glu	Pro
				125					130					135
Glu	Glu	Glu	Ile	Asp	Glu	Asn	Glu	Glu	Ile	Thr	Thr	Thr	Phe	Phe
				140					145					150
Glu	Gln	Ser	Val	Ile	Trp	Val	Pro	Ala	Glu	Lys	Pro	Ile	Glu	Asn
				155					160					165
Arg	Asp	Phe	Leu	Lys	Asn	Ser	Lys	Ile	Leu	Glu	Ile	Cys	Asp	Asn
				170					175					180
Val	Thr	Met	Tyr	Trp	Ile	Asn	Pro	Thr	Leu	Ile	Ser	Val	Ser	Glu
				185					190					195
Leu	Gln	Asp	Phe	Glu	Glu	Glu	Gly	Glu	Asp	Leu	His	Phe	Pro	Ala
				200					205					210
Asn	Glu	Lys	Lys	Gly	Ile	Glu	Gln	Asn	Glu	Gln	Trp	Val	Val	Pro
				215					220					225
Gln	Val	Lys	Val	Glu	Lys	Thr	Arg	His	Ala	Arg	Gln	Ala	Ser	Glu
				230					235					240
Glu	Glu	Leu	Pro	Ile	Asn	Asp	Tyr	Thr	Glu	Asn	Gly	Ile	Glu	Phe
				245					250					255
Asp	Pro	Met	Leu	Asp	Glu	Arg	Gly	Tyr	Cys	Cys	Ile	Tyr	Cys	Arg
				260					265					270
Arg	Gly	Asn	Arg	Tyr	Cys	Arg	Arg	Val	Cys	Glu	Pro	Leu	Leu	Gly
				275					280					285
Tyr	Tyr	Pro	Tyr	Pro	Tyr	Cys	Tyr	Gln	Gly	Gly	Arg	Val	Ile	Cys
				290					295					300
Arg	Val	Ile	Met	Pro	Cys	Asn	Trp	Trp	Val	Ala	Arg	Met	Leu	Gly
				305					310					315

Arg Val

<210> 117

<211> 2121

<212> DNA

<213> Homo Sapien

<400> 117

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 cacatgccaa gtggtggcgt tcctcctgtc catcctgggg ctggccggct 150
 gcatcgcggc caccgggatg gacatgtgga gcacccagga cctgtacgac 200
 aaccccgta cctccgtgtt ccagtacgaa gggctctgga ggagctgcgt 250
 gaggcagagt tcaggcttca ccgaatgcag gccctatttc accatcctgg 300
 gacttccagc catgctgcag gcagtgcgag ccctgatgat cgtaggcac 350
 gtcttgggtg ccattggcct cctggatatcc atctttgccc tgaaatgcat 400
 ccgcattggc agcatggagg actctgccaa agccaacatg aactgacct 450
 ccgggatcat gttcattgtc tcaggctctt gtgcaattgc tggagtgtct 500
 gtgtttgcca acatgctggg gactaacttc tggatgtcca cagctaacat 550
 gtacaccggc atgggtggga tgggtgcagac tgttcagacc aggtacacat 600
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 gggggtgtga tgatgtgcat cgctgccgg ggctggcac cagaagaaac 700
 caactacaaa gccgtttctt atcatgcctc aggccacagt gttgcctaca 750
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 tccttccaag cacgactatg tgtaatgctc taagacctct cagcacgggc 900
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 cccctcttc ctctagtca ataaacccat tgatgatcta tttcccagct 1250
 tatccccaag aaaacttttg aaaggaaaga gtagaccxaa agatgttatt 1300
 ttctgctgtt tgaattttgt ctccccaccc ccaacttggc tagtaataaa 1350
 cacttactga agaagaagca ataagagaaa gatatttgta atctctccag 1400
 cccatgatct cggttttctt acactgtgat cttaaaagtt accaaaccaa 1450

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 aaaaaatcag ccagtcatgg tggcatacac ctgtagtccc agcattccgg 1950
 gaggctgagg tgggaggatc acttgagccc agggaggttg gggctgcagt 2000
 gagccatgat cacaccactg cactccagcc aggtgacata gcgagatcct 2050
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 aggttaaaac taattcttta a 2121

<210> 118

<211> 261

<212> PRT

<213> Homo Sapien

<400> 118

Met	Ser	Thr	Thr	Thr	Cys	Gln	Val	Val	Ala	Phe	Leu	Leu	Ser	Ile
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Leu	Gly	Leu	Ala	Gly	Cys	Ile	Ala	Ala	Thr	Gly	Met	Asp	Met	Trp
				20					25					30
Ser	Thr	Gln	Asp	Leu	Tyr	Asp	Asn	Pro	Val	Thr	Ser	Val	Phe	Gln
				35					40					45
Tyr	Glu	Gly	Leu	Trp	Arg	Ser	Cys	Val	Arg	Gln	Ser	Ser	Gly	Phe
				50					55					60
Thr	Glu	Cys	Arg	Pro	Tyr	Phe	Thr	Ile	Leu	Gly	Leu	Pro	Ala	Met
				65					70					75
Leu	Gln	Ala	Val	Arg	Ala	Leu	Met	Ile	Val	Gly	Ile	Val	Leu	Gly
				80					85					90
Ala	Ile	Gly	Leu	Leu	Val	Ser	Ile	Phe	Ala	Leu	Lys	Cys	Ile	Arg
				95					100					105
Ile	Gly	Ser	Met	Glu	Asp	Ser	Ala	Lys	Ala	Asn	Met	Thr	Leu	Thr
				110					115					120

Ser Gly Ile Met Phe Ile Val Ser Gly Leu Cys Ala Ile Ala Gly	125	130	135
Val Ser Val Phe Ala Asn Met Leu Val Thr Asn Phe Trp Met Ser	140	145	150
Thr Ala Asn Met Tyr Thr Gly Met Gly Gly Met Val Gln Thr Val	155	160	165
Gln Thr Arg Tyr Thr Phe Gly Ala Ala Leu Phe Val Gly Trp Val	170	175	180
Ala Gly Gly Leu Thr Leu Ile Gly Gly Val Met Met Cys Ile Ala	185	190	195
Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr Lys Ala Val Ser	200	205	210
Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro Gly Gly Phe	215	220	225
Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys Lys Ile	230	235	240
Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr Pro	245	250	255
Ser Lys His Asp Tyr Val	260		

<210> 119
 <211> 2010
 <212> DNA
 <213> Homo Sapien

<400> 119
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 cattgaaaac aacatcgtgg tttttgaaaa cttctgggaa ggactgtgga 250
 tgaattgcgt gaggcaggct aacatcagga tgcagtgcaa aatctatgat 300
 tccctgctgg ctctttctcc ggacctacag gcagccagag gactgatgtg 350
 tgctgcttcc gtgatgtcct tcttggttt catgatggcc atccttgga 400
 tgaaatgcac caggtgcacg ggggacaatg agaaggtgaa ggctcacatt 450
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ccctgtgagc tgggttgcca atgccatcat cagagatttc tataactcaa 550
 tagtgaatgt tgcccaaaaa cgtgagcttg gagaagctct ctacttagga 600
 tggaccacgg cactggtgct gattgttgga ggagctctgt tctgctgcgt 650
 tttttgttgc aacgaaaaga gcagtagcta cagatactcg ataccttccc 700
 atcgcacaac ccaaaaaagt tatcacaccg gaaagaagtc accgagcgtc 750
 tactccagaa gtcagtatgt gtagttgtgt atgttttttt aactttacta 800
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 caaagaaact ttgatttact gttcttaact gcctaattctt aattacagga 900
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 ctattaattg tttaaaaaca gcttagggat taatgtcctc catttataat 1300
 gaagattaaa atgaaggctt taatcagcat tgtaaaggaa attgaatggc 1350
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 gttttaggaa agtgaaaata tttttgtttt tgtatttgaa gaagaatgat 1600
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 ttttactaaa atctgtaaat actgtatttt tctgtttatt ccaaatttga 1900
 tgaaactgac aatccaattt gaaagtttgt gtcgacgtct gtctagctta 1950

aatgaatgtg ttctatttgc tttatacatt tatattaata aattgtacat 2000

ttttctaatt 2010

<210> 120

<211> 225

<212> PRT

<213> Homo Sapien

<400> 120

Met	Ala	Thr	His	Ala	Leu	Glu	Ile	Ala	Gly	Leu	Phe	Leu	Gly	Gly
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Val	Gly	Met	Val	Gly	Thr	Val	Ala	Val	Thr	Val	Met	Pro	Gln	Trp
				20					25					30

Arg	Val	Ser	Ala	Phe	Ile	Glu	Asn	Asn	Ile	Val	Val	Phe	Glu	Asn
				35					40					45

Phe	Trp	Glu	Gly	Leu	Trp	Met	Asn	Cys	Val	Arg	Gln	Ala	Asn	Ile
				50					55					60

Arg	Met	Gln	Cys	Lys	Ile	Tyr	Asp	Ser	Leu	Leu	Ala	Leu	Ser	Pro
				65					70					75

Asp	Leu	Gln	Ala	Ala	Arg	Gly	Leu	Met	Cys	Ala	Ala	Ser	Val	Met
				80					85					90

Ser	Phe	Leu	Ala	Phe	Met	Met	Ala	Ile	Leu	Gly	Met	Lys	Cys	Thr
				95					100					105

Arg	Cys	Thr	Gly	Asp	Asn	Glu	Lys	Val	Lys	Ala	His	Ile	Leu	Leu
				110					115					120

Thr	Ala	Gly	Ile	Ile	Phe	Ile	Ile	Thr	Gly	Met	Val	Val	Leu	Ile
				125					130					135

Pro	Val	Ser	Trp	Val	Ala	Asn	Ala	Ile	Ile	Arg	Asp	Phe	Tyr	Asn
				140					145					150

Ser	Ile	Val	Asn	Val	Ala	Gln	Lys	Arg	Glu	Leu	Gly	Glu	Ala	Leu
				155					160					165

Tyr	Leu	Gly	Trp	Thr	Thr	Ala	Leu	Val	Leu	Ile	Val	Gly	Gly	Ala
				170					175					180

Leu	Phe	Cys	Cys	Val	Phe	Cys	Cys	Asn	Glu	Lys	Ser	Ser	Ser	Tyr
				185					190					195

Arg	Tyr	Ser	Ile	Pro	Ser	His	Arg	Thr	Thr	Gln	Lys	Ser	Tyr	His
				200					205					210

Thr	Gly	Lys	Lys	Ser	Pro	Ser	Val	Tyr	Ser	Arg	Ser	Gln	Tyr	Val
				215					220					225

<210> 121

<211> 1257
<212> DNA
<213> Homo Sapien

<400> 121
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ccgcctccag ctccgcgctg cccggcagcc gggagccatg cgaccccagg 150
gccccgcgcg cccccgcag cggctccgcg gcctcctgct gctcctgctg 200
ctgcagctgc ccgcgccgtc gagcgcctct gagatcccca aggggaagca 250
aaaggcgcag ctccggcaga gggaggtggt ggacctgtat aatggaatgt 300
gcttacaagg gccagcagga gtgcctggtc gagacgggag ccctggggcc 350
aatgttattc cgggtacacc tgggatccca ggtcgggatg gattcaaagg 400
agaaaagggg gaatgtctga gggaaagctt tgaggagtcc tggacacca 450
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aaaattgcgg agtgtacatt tacaagatg cgttcaaata gtgctctaag 550
agttttgttc agtggctcac ttcggctaaa atgcagaaat gcatgctgtc 600
agcgttggtg tttcacattc aatggagctg aatgttcagg acctcttccc 650
attgaagcta taatttat tggaccaagga agccctgaaa tgaattcaac 700
aattaatatt catcgcactt cttctgtgga aggactttgt gaaggaattg 750
gtgctggatt agtggatggt gctatctggg ttggcacttg ttcagattac 800
ccaaaaggag atgcttctac tggatggaat tcagtttctc gcatcattat 850
tgaagaacta ccaaaataaa tgctttaatt ttcatttgct acctcttttt 900
ttattatgcc ttggaatggt tcacttaaat gacattttta ataagtttat 950
gtatacatct gaatgaaaag caaagctaaa tatgtttaca gaccaaagt 1000
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acattctctc aacctataat ttggaatatt gttgtggtct tttgtttttt 1150
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aatttgtaaa tgttaagaat tttttttata tctgttaa ataaaaattatt 1250
tccaaca 1257

<210> 122

<211> 243
 <212> PRT
 <213> Homo Sapien

<400> 122

Met	Arg	Pro	Gln	Gly	Pro	Ala	Ala	Ser	Pro	Gln	Arg	Leu	Arg	Gly
1				5					10					15
Leu	Leu	Leu	Leu	Leu	Leu	Leu	Gln	Leu	Pro	Ala	Pro	Ser	Ser	Ala
				20					25					30
Ser	Glu	Ile	Pro	Lys	Gly	Lys	Gln	Lys	Ala	Gln	Leu	Arg	Gln	Arg
				35					40					45
Glu	Val	Val	Asp	Leu	Tyr	Asn	Gly	Met	Cys	Leu	Gln	Gly	Pro	Ala
				50					55					60
Gly	Val	Pro	Gly	Arg	Asp	Gly	Ser	Pro	Gly	Ala	Asn	Val	Ile	Pro
				65					70					75
Gly	Thr	Pro	Gly	Ile	Pro	Gly	Arg	Asp	Gly	Phe	Lys	Gly	Glu	Lys
				80					85					90
Gly	Glu	Cys	Leu	Arg	Glu	Ser	Phe	Glu	Glu	Ser	Trp	Thr	Pro	Asn
				95					100					105
Tyr	Lys	Gln	Cys	Ser	Trp	Ser	Ser	Leu	Asn	Tyr	Gly	Ile	Asp	Leu
				110					115					120
Gly	Lys	Ile	Ala	Glu	Cys	Thr	Phe	Thr	Lys	Met	Arg	Ser	Asn	Ser
				125					130					135
Ala	Leu	Arg	Val	Leu	Phe	Ser	Gly	Ser	Leu	Arg	Leu	Lys	Cys	Arg
				140					145					150
Asn	Ala	Cys	Cys	Gln	Arg	Trp	Tyr	Phe	Thr	Phe	Asn	Gly	Ala	Glu
				155					160					165
Cys	Ser	Gly	Pro	Leu	Pro	Ile	Glu	Ala	Ile	Ile	Tyr	Leu	Asp	Gln
				170					175					180
Gly	Ser	Pro	Glu	Met	Asn	Ser	Thr	Ile	Asn	Ile	His	Arg	Thr	Ser
				185					190					195
Ser	Val	Glu	Gly	Leu	Cys	Glu	Gly	Ile	Gly	Ala	Gly	Leu	Val	Asp
				200					205					210
Val	Ala	Ile	Trp	Val	Gly	Thr	Cys	Ser	Asp	Tyr	Pro	Lys	Gly	Asp
				215					220					225
Ala	Ser	Thr	Gly	Trp	Asn	Ser	Val	Ser	Arg	Ile	Ile	Ile	Glu	Glu
				230					235					240

Leu Pro Lys

<210> 123

<211> 2379
<212> DNA
<213> Homo Sapien

<400> 123
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atacagatgt ggcagctcag gtagcccaa attgcctgga agaatacatc 150
atgttttttcg ataagaagaa attgtaggat ccagtttttt ttttaaccgc 200
cccctcccca cccccaaaa aaactgtaaa gatgcaaaaa cgtaatatcc 250
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tgttgggatt tatttgttct tggagtgttc tgcgtggctg gcaaagaata 350
atgttcctaaa atcgggtccat ctcccaaggg gtccaatttt tcttcctggg 400
tgtcagcgag cctgactca ctacagtga gctgacaggg gctgtcatgc 450
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acaaaggatg ggtttcaatg taattaggct actgagcgga tcagctgtag 550
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cgaggatgcc ctaagggtg taggtgtgaa ggcaaatgg tatattgtga 650
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gtttgtccct tcgtataac agccttcaaa aacttaagta taatcaattt 750
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caatattgac gaaaatgctt ttaatggaat acgcagactc aaagagctga 850
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 aatgcagcag aaatatttgc tcccttgtaa actggctgaa aagttttaaa 1500
 ggtctaaggg agaatacaat tatctgtgcc agtcccaaag agctgcaagg 1550
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 gggaccctgc acctataaca aatcgggctc caggagagtgt gaggtatgaa 2050
 ccattgtgat aaaaagagct cttaaaagct gggaaataag tgggtgcttta 2100
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 tcataatact ggtcattttc ctctcatata taatcaaccc attgaaattt 2250
 aaataccaca atcaatgtga agcttgaact ccggtttaat ataataccta 2300
 ttgtataaga ccctttactg attccattaa tgtcgcatth gttttaagat 2350
 aaaacttctt tcataggtaa aaaaaaaaa 2379

<210> 124

<211> 513

<212> PRT

<213> Homo Sapien

<400> 124

Met	Gly	Phe	Asn	Val	Ile	Arg	Leu	Leu	Ser	Gly	Ser	Ala	Val	Ala
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Leu	Val	Ile	Ala	Pro	Thr	Val	Leu	Leu	Thr	Met	Leu	Ser	Ser	Ala
			20					25					30	
Glu	Arg	Gly	Cys	Pro	Lys	Gly	Cys	Arg	Cys	Glu	Gly	Lys	Met	Val
			35					40					45	

Tyr	Cys	Glu	Ser	Gln	Lys	Leu	Gln	Glu	Ile	Pro	Ser	Ser	Ile	Ser	
				50					55					60	
Ala	Gly	Cys	Leu	Gly	Leu	Ser	Leu	Arg	Tyr	Asn	Ser	Leu	Gln	Lys	
				65					70					75	
Leu	Lys	Tyr	Asn	Gln	Phe	Lys	Gly	Leu	Asn	Gln	Leu	Thr	Trp	Leu	
				80					85					90	
Tyr	Leu	Asp	His	Asn	His	Ile	Ser	Asn	Ile	Asp	Glu	Asn	Ala	Phe	
				95					100					105	
Asn	Gly	Ile	Arg	Arg	Leu	Lys	Glu	Leu	Ile	Leu	Ser	Ser	Asn	Arg	
				110					115					120	
Ile	Ser	Tyr	Phe	Leu	Asn	Asn	Thr	Phe	Arg	Pro	Val	Thr	Asn	Leu	
				125					130					135	
Arg	Asn	Leu	Asp	Leu	Ser	Tyr	Asn	Gln	Leu	His	Ser	Leu	Gly	Ser	
				140					145					150	
Glu	Gln	Phe	Arg	Gly	Leu	Arg	Lys	Leu	Leu	Ser	Leu	His	Leu	Arg	
				155					160					165	
Ser	Asn	Ser	Leu	Arg	Thr	Ile	Pro	Val	Arg	Ile	Phe	Gln	Asp	Cys	
				170					175					180	
Arg	Asn	Leu	Glu	Leu	Leu	Asp	Leu	Gly	Tyr	Asn	Arg	Ile	Arg	Ser	
				185					190					195	
Leu	Ala	Arg	Asn	Val	Phe	Ala	Gly	Met	Ile	Arg	Leu	Lys	Glu	Leu	
				200					205					210	
His	Leu	Glu	His	Asn	Gln	Phe	Ser	Lys	Leu	Asn	Leu	Ala	Leu	Phe	
				215					220					225	
Pro	Arg	Leu	Val	Ser	Leu	Gln	Asn	Leu	Tyr	Leu	Gln	Trp	Asn	Lys	
				230					235					240	
Ile	Ser	Val	Ile	Gly	Gln	Thr	Met	Ser	Trp	Thr	Trp	Ser	Ser	Leu	
				245					250					255	
Gln	Arg	Leu	Asp	Leu	Ser	Gly	Asn	Glu	Ile	Glu	Ala	Phe	Ser	Gly	
				260					265					270	
Pro	Ser	Val	Phe	Gln	Cys	Val	Pro	Asn	Leu	Gln	Arg	Leu	Asn	Leu	
				275					280					285	
Asp	Ser	Asn	Lys	Leu	Thr	Phe	Ile	Gly	Gln	Glu	Ile	Leu	Asp	Ser	
				290					295					300	
Trp	Ile	Ser	Leu	Asn	Asp	Ile	Ser	Leu	Ala	Gly	Asn	Ile	Trp	Glu	
				305					310					315	
Cys	Ser	Arg	Asn	Ile	Cys	Ser	Leu	Val	Asn	Trp	Leu	Lys	Ser	Phe	
				320					325					330	

Lys Gly Leu Arg	Glu Asn Thr Ile Ile	Cys Ala Ser Pro Lys Glu	
	335	340	345
Leu Gln Gly Val	Asn Val Ile Asp Ala Val	Lys Asn Tyr Ser Ile	
	350	355	360
Cys Gly Lys Ser	Thr Thr Glu Arg Phe	Asp Leu Ala Arg Ala Leu	
	365	370	375
Pro Lys Pro Thr	Phe Lys Pro Lys Leu	Pro Arg Pro Lys His Glu	
	380	385	390
Ser Lys Pro Pro	Leu Pro Pro Thr Val	Gly Ala Thr Glu Pro Gly	
	395	400	405
Pro Glu Thr Asp	Ala Asp Ala Glu His	Ile Ser Phe His Lys Ile	
	410	415	420
Ile Ala Gly Ser	Val Ala Leu Phe Leu	Ser Val Leu Val Ile Leu	
	425	430	435
Leu Val Ile Tyr	Val Ser Trp Lys Arg	Tyr Pro Ala Ser Met Lys	
	440	445	450
Gln Leu Gln Gln	Arg Ser Leu Met Arg	Arg His Arg Lys Lys Lys	
	455	460	465
Arg Gln Ser Leu	Lys Gln Met Thr Pro	Ser Thr Gln Glu Phe Tyr	
	470	475	480
Val Asp Tyr Lys	Pro Thr Asn Thr Glu	Thr Ser Glu Met Leu Leu	
	485	490	495
Asn Gly Thr Gly	Pro Cys Thr Tyr Asn	Lys Ser Gly Ser Arg Glu	
	500	505	510
Cys Glu Val			

<210> 125
 <211> 998
 <212> DNA
 <213> Homo Sapien

<400> 125
 ccgttatcgt cttgcgctac tgctgaatgt ccgtcccgga ggaggaggag 50
 aggcttttgc cgctgaccca gagatggccc cgagcgagca aattcctact 100
 gtccggctgc gcggtaccg tggccgagct agcaaccttt cccctggatc 150
 tcacaaaaaac tcgactccaa atgcaaggag aagcagctct tgctcggttg 200
 ggagacggtg caagagaatc tgccccctat aggggaatgg tgcgcacagc 250
 cctagggatc attgaagagg aaggctttct aaagctttgg caaggagtga 300

caccgccat ttacagacac gtagtgtatt ctggaggtcg aatggtcaca 350
 tatgaacatc tccgagaggt tgtgtttggc aaaagtgaag atgagcatta 400
 tcccccttgg aaatcagtca ttggagggat gatggctggt gttattggcc 450
 agtttttagc caatccaact gacctagtga aggttcagat gcaaattggaa 500
 ggaaaaagga aactggaagg aaaaccattg cgatttcgtg gtgtacatca 550
 tgcatttgca aaaatcttag ctgaaggagg aatacgaggg ctttgggcag 600
 gctgggtacc caatatacaa agagcagcac tggatgaatat gggagattta 650
 accacttatg atacagtga acactacttg gtattgaata caccacttga 700
 ggacaatatc atgactcacg gtttatcaag tttatgttct ggactggtag 750
 cttctattct gggaacacca gccgatgtca tcaaaagcag aataatgaat 800
 caaccacgag ataaacaagg aaggggactt ttgtataaat catcgactga 850
 ctgcttgatt caggctgttc aaggtgaagg attcatgagt ctatataaag 900
 gctttttacc atcttggtg agaatgaccc cttggtcaat ggtgttctgg 950
 cttacttatg aaaaaatcag agagatgagt ggagtcagtc cattttaa 998

<210> 126

<211> 323

<212> PRT

<213> Homo Sapien

<400> 126

Met	Ser	Val	Pro	Glu	Glu	Glu	Glu	Arg	Leu	Leu	Pro	Leu	Thr	Gln
1				5					10					15
Arg	Trp	Pro	Arg	Ala	Ser	Lys	Phe	Leu	Leu	Ser	Gly	Cys	Ala	Ala
				20					25					30
Thr	Val	Ala	Glu	Leu	Ala	Thr	Phe	Pro	Leu	Asp	Leu	Thr	Lys	Thr
				35					40					45
Arg	Leu	Gln	Met	Gln	Gly	Glu	Ala	Ala	Leu	Ala	Arg	Leu	Gly	Asp
				50					55					60
Gly	Ala	Arg	Glu	Ser	Ala	Pro	Tyr	Arg	Gly	Met	Val	Arg	Thr	Ala
				65					70					75
Leu	Gly	Ile	Ile	Glu	Glu	Glu	Gly	Phe	Leu	Lys	Leu	Trp	Gln	Gly
				80					85					90
Val	Thr	Pro	Ala	Ile	Tyr	Arg	His	Val	Val	Tyr	Ser	Gly	Gly	Arg
				95					100					105
Met	Val	Thr	Tyr	Glu	His	Leu	Arg	Glu	Val	Val	Phe	Gly	Lys	Ser
				110					115					120

Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly Met		
	125	130 135
Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu		
	140	145 150
Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly		
	155	160 165
Lys Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile		
	170	175 180
Leu Ala Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val Pro		
	185	190 195
Asn Ile Gln Arg Ala Ala Leu Val Asn Met Gly Asp Leu Thr Thr		
	200	205 210
Tyr Asp Thr Val Lys His Tyr Leu Val Leu Asn Thr Pro Leu Glu		
	215	220 225
Asp Asn Ile Met Thr His Gly Leu Ser Ser Leu Cys Ser Gly Leu		
	230	235 240
Val Ala Ser Ile Leu Gly Thr Pro Ala Asp Val Ile Lys Ser Arg		
	245	250 255
Ile Met Asn Gln Pro Arg Asp Lys Gln Gly Arg Gly Leu Leu Tyr		
	260	265 270
Lys Ser Ser Thr Asp Cys Leu Ile Gln Ala Val Gln Gly Glu Gly		
	275	280 285
Phe Met Ser Leu Tyr Lys Gly Phe Leu Pro Ser Trp Leu Arg Met		
	290	295 300
Thr Pro Trp Ser Met Val Phe Trp Leu Thr Tyr Glu Lys Ile Arg		
	305	310 315
Glu Met Ser Gly Val Ser Pro Phe		
	320	

<210> 127
 <211> 1505
 <212> DNA
 <213> Homo Sapien

<400> 127
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 ggcgtgggcc catggccagg cccggcatgg agcgggtggcg cgaccggctg 150
 gcgctggtga cgggggcctc ggggggcata ggcgcggccg tggcccgggc 200
 cctggtccag cagggactga aggtggtggg ctgcgccgc actgtgggca 250

acatcgagga gctggctgct gaatgtaaga gtgcaggcta ccccgaggact 300
 ttgatccctt acagatgtga cctatcaaata gaagaggaca tctcttccat 350
 gttctcagct atccgtttct agcacagcgg tgtagacatc tgcatacaaca 400
 atgctggctt ggcccgccct gacaccctgc tctcaggcag caccagtggg 450
 tggaaggaca tgttcaatgt gaacgtgctg gccctcagca tctgcacacg 500
 ggaagcctac cagtccatga aggagcggaa tgtggacgat gggcacatca 550
 ttaacatcaa tagcatgtct ggccaccgag tgttaccctt gtctgtgacc 600
 cacttctata gtgccaccaa gtatgccgtc actgcgctga cagagggact 650
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 ctccaggtgt ggtggagaca caattgcctt tcaaactcca cgacaaggac 750
 cctgagaagg cagctgccac ctatgagcaa atgaagtgtc tcaaaccgga 800
 ggatgtggcc gaggtgttta tctacgtcct cagcaccctc gcacacatcc 850
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 aaaaa 1505

<210> 128
 <211> 260
 <212> PRT
 <213> Homo Sapien

<400> 128

Met	Ala	Arg	Pro	Gly	Met	Glu	Arg	Trp	Arg	Asp	Arg	Leu	Ala	Leu	1	5	10	15
Val	Thr	Gly	Ala	Ser	Gly	Gly	Ile	Gly	Ala	Ala	Val	Ala	Arg	Ala	20	25	30	
Leu	Val	Gln	Gln	Gly	Leu	Lys	Val	Val	Gly	Cys	Ala	Arg	Thr	Val	35	40	45	
Gly	Asn	Ile	Glu	Glu	Leu	Ala	Ala	Glu	Cys	Lys	Ser	Ala	Gly	Tyr	50	55	60	
Pro	Gly	Thr	Leu	Ile	Pro	Tyr	Arg	Cys	Asp	Leu	Ser	Asn	Glu	Glu	65	70	75	
Asp	Ile	Leu	Ser	Met	Phe	Ser	Ala	Ile	Arg	Ser	Gln	His	Ser	Gly	80	85	90	
Val	Asp	Ile	Cys	Ile	Asn	Asn	Ala	Gly	Leu	Ala	Arg	Pro	Asp	Thr	95	100	105	
Leu	Leu	Ser	Gly	Ser	Thr	Ser	Gly	Trp	Lys	Asp	Met	Phe	Asn	Val	110	115	120	
Asn	Val	Leu	Ala	Leu	Ser	Ile	Cys	Thr	Arg	Glu	Ala	Tyr	Gln	Ser	125	130	135	
Met	Lys	Glu	Arg	Asn	Val	Asp	Asp	Gly	His	Ile	Ile	Asn	Ile	Asn	140	145	150	
Ser	Met	Ser	Gly	His	Arg	Val	Leu	Pro	Leu	Ser	Val	Thr	His	Phe	155	160	165	
Tyr	Ser	Ala	Thr	Lys	Tyr	Ala	Val	Thr	Ala	Leu	Thr	Glu	Gly	Leu	170	175	180	
Arg	Gln	Glu	Leu	Arg	Glu	Ala	Gln	Thr	His	Ile	Arg	Ala	Thr	Cys	185	190	195	
Ile	Ser	Pro	Gly	Val	Val	Glu	Thr	Gln	Phe	Ala	Phe	Lys	Leu	His	200	205	210	
Asp	Lys	Asp	Pro	Glu	Lys	Ala	Ala	Ala	Thr	Tyr	Glu	Gln	Met	Lys	215	220	225	
Cys	Leu	Lys	Pro	Glu	Asp	Val	Ala	Glu	Ala	Val	Ile	Tyr	Val	Leu	230	235	240	
Ser	Thr	Pro	Ala	His	Ile	Gln	Ile	Gly	Asp	Ile	Gln	Met	Arg	Pro	245	250	255	
Thr	Glu	Gln	Val	Thr											260			

<210> 129

<211> 1177

<212> DNA

<213> Homo Sapien

<400> 129

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tcaggtgcag agtctcagtt gcccgaggag acctcccctc ccgaggcagt 150
ctgctcagag ggcctcggcc cagaattcca gttctggttt catgccagcc 200
tgtaaaaggc catggaactt tgggtgaatc accgatgcca tttaagaggg 250
ttttctgccg gatggaaat gttaggctgt tctgtgtctg cgctgttcat 300
ttcagtagcc accagccacc tgtggccgtt gagtgcctga aatgaggaac 350
tgagaaaatt aatttctcat gtatttttct catttattta ttaattttta 400
actgatagtt gtacatattt gggggtacat gtgatatttg gatacatgta 450
tacaatatat aatgatcaaa tcagggtaac tgggatatcc atcacatcaa 500
acatttattt tttattcttt ttagacagag tctcactctg tcaccaggc 550
tggagtgcag tgggtgccatc tcagcttact gcaacctctg cctgccaggt 600
tcaagcgatt ctcatgcctc cacctcccaa gtagctggga ctacaggcat 650
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gccatgttgc ccaggctggc cttgaactcc tggcctcaaa caatccactt 750
gcctcggcct cccaaagtgt tatgattaca ggcgtgagcc accgtgcctg 800
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tcttccctct atctaactgt atatttgtac cagttaacca accgtacttc 950
atccccactc ctctctatcc ttcccaacct ctgatcacct cattctactc 1000
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tgcaatattt gtctttctgt gcctggctta tttcacttaa cataatgact 1100
tcctgttcca tccatgttgc tgcaaatgac aggatttcgt tcttaatttc 1150
aattaaaata accacacatg gcaaaaa 1177

<210> 130

<211> 111

<212> PRT

<213> Homo Sapien

<400> 130

Met Gly Leu Leu Leu Leu Val Leu Phe Leu Ser Leu Leu Pro Val

1	5	10	15
Ala Tyr Thr Ile Met Ser Leu Pro Pro Ser Phe Asp Cys Gly Pro	20	25	30
Phe Arg Cys Arg Val Ser Val Ala Arg Glu His Leu Pro Ser Arg	35	40	45
Gly Ser Leu Leu Arg Gly Pro Arg Pro Arg Ile Pro Val Leu Val	50	55	60
Ser Cys Gln Pro Val Lys Gly His Gly Thr Leu Gly Glu Ser Pro	65	70	75
Met Pro Phe Lys Arg Val Phe Cys Gln Asp Gly Asn Val Arg Ser	80	85	90
Phe Cys Val Cys Ala Val His Phe Ser Ser His Gln Pro Pro Val	95	100	105
Ala Val Glu Cys Leu Lys	110		

<210> 131
 <211> 2061
 <212> DNA
 <213> Homo Sapien

<400> 131
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 atgatcagcg cagcctggag catcttcctc atcgggacta aaattgggct 100
 gttccttcaa gtagcacctc tatcagttat ggctaaatcc tgtccatctg 150
 tgtgtcgctg cgatgcggtt ttcatttact gtaatgatcg ctttctgaca 200
 tccattccaa caggaatacc agaggatgct acaactctct accttcagaa 250
 caaccaaata aataatgctg ggattccttc agatttgaaa aacttgctga 300
 aagtagaaaag aatataccta taccacaaca gtttagatga atttcctacc 350
 aacctcccaa agtatgtaaa agagttacat ttgcaagaaa ataacataag 400
 gactatcact tatgattcac tttcaaaaat tccctatctg gaagaattac 450
 atttagatga caactctgtc tctgcagtta gcatagaaga gggagcattc 500
 cgagacagca actatctccg actgcttttc ctgtcccgta atcaccttag 550
 cacaattccc tgggggttgc ccaggactat agaagaacta cgcttggtatg 600
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 ctaaaacgcc tggttctaga tggaaacctg ttgaacaatc atgggttagg 700

tgacaaagtt ttcttcaacc tagttaattt gacagagctg tccctgggtgc 750
 ggaattccct gactgctgca ccagtaaacc ttccaggcac aaacctgagg 800
 aagctttatc ttcaagataa ccacatcaat cgggtgcccc caaatgcttt 850
 ttcttatcta aggcagctct atcgactgga tatgtccaat aataacctaa 900
 gtaatttacc tcagggtatc tttgatgatt tggacaatat aacacaactg 950
 attcttcgca acaatccctg gtattgcggg tgcaagatga aatgggtacg 1000
 tgactgggta caatcactac ctgtgaaggt caacgtgcgt gggctcatgt 1050
 gccaaagcccc agaaaagggt cgtgggatgg ctattaagga tctcaatgca 1100
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 cagtgaccaa acagccagat attaagaacc ccaagctcac taaggatcaa 1250
 caaaccacag ggagtcctc aagaaaaaca attacaatta ctgtgaagtc 1300
 tgtcacctct gataccattc atatctcttg gaaacttgct ctacctatga 1350
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 tctataacag aaacaattgt aacaggggaa cgcagtgagt acttggtcac 1450
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 ccagcaacct ctacctattt gatgaaactc ctgtttgtat tgagactgaa 1550
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<210> 132

<400> 132

<213> Home

<400> 132

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20 25 30

20 25 30

Cys Pro Ser Val Cys Arg Cys Asp Ala Gly Phe Ile Tyr Cys Asn
35 40 45

35 40 45

Asp Arg Phe Leu Thr Ser Ile Pro Thr Gly Ile Pro Glu Asp Ala
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50 55 60

Thr Thr Leu Tyr Leu Gln Asn Asn Gln Ile Asn Asn Ala Gly Ile
65 70 75

65 70 75

Pro Ser Asp Leu Lys Asn Leu Leu Lys Val Glu Arg Ile Tyr Leu
80 85 90

80 85 90

Tyr His Asn Ser Leu Asp Glu Phe Pro Thr Asn Leu Pro Lys Tyr
95 100 105

95 100 105

Val	Lys	Glu	Leu	His	Leu	Gln	Glu	Asn	Asn	Ile	Arg	Thr	Ile	Thr
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110 115 120

Tyr Asp Ser Leu Ser Lys Ile Pro Tyr Leu Glu Glu Leu His Leu
125 130 135

125 130 135

Asp Asp Asn Ser Val Ser Ala Val Ser Ile Glu Glu Gly Ala Phe
140 145 150

140 145 150

Arg Asp Ser Asn Tyr Leu Arg Leu Leu Phe Leu Ser Arg Asn His
155 160 165

155 160 165

Leu Ser Thr Ile Pro Trp Gly Leu Pro Arg Thr Ile Glu Glu Leu
170 175 180

170 175 180

Arg Leu Asp Asp Asn Arg Ile Ser Thr Ile Ser Ser Pro Ser Leu
185 190 195

185 190 195

Gln Gly Leu Thr Ser Leu Lys Arg Leu Val Leu Asp Gly Asn Leu
200 205 210

200 205 210

Leu	Asn	Asn	His	Gly	Leu	Gly	Asp	Lys	Val	Phe	Phe	Asn	Leu	Val
				215					220					225

215 220 225

Asn Leu Thr Glu Leu Ser Leu Val Arg Asn Ser Leu Thr Ala Ala
230 235 240

230 235 240

Pro	Val	Asn	Leu	Pro	Gly	Thr	Asn	Leu	Arg	Lys	Leu	Tyr	Leu	Gln
				245					250					255

245 250 255

Asp Asn His Ile Asn Arg Val Pro Pro Asn Ala Phe Ser Tyr Leu

260	265	270
Arg Gln Leu Tyr	Arg Leu Asp Met Ser Asn Asn Asn Leu Ser Asn	
275	280	285
Leu Pro Gln Gly	Ile Phe Asp Asp Leu Asp Asn Ile Thr Gln Leu	
290	295	300
Ile Leu Arg Asn	Asn Pro Trp Tyr Cys Gly Cys Lys Met Lys Trp	
305	310	315
Val Arg Asp Trp	Leu Gln Ser Leu Pro Val Lys Val Asn Val Arg	
320	325	330
Gly Leu Met Cys	Gln Ala Pro Glu Lys Val Arg Gly Met Ala Ile	
335	340	345
Lys Asp Leu Asn	Ala Glu Leu Phe Asp Cys Lys Asp Ser Gly Ile	
350	355	360
Val Ser Thr Ile	Gln Ile Thr Thr Ala Ile Pro Asn Thr Val Tyr	
365	370	375
Pro Ala Gln Gly	Gln Trp Pro Ala Pro Val Thr Lys Gln Pro Asp	
380	385	390
Ile Lys Asn Pro	Lys Leu Thr Lys Asp Gln Gln Thr Thr Gly Ser	
395	400	405
Pro Ser Arg Lys	Thr Ile Thr Ile Thr Val Lys Ser Val Thr Ser	
410	415	420
Asp Thr Ile His	Ile Ser Trp Lys Leu Ala Leu Pro Met Thr Ala	
425	430	435
Leu Arg Leu Ser	Trp Leu Lys Leu Gly His Ser Pro Ala Phe Gly	
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Ser Ile Thr Glu	Thr Ile Val Thr Gly Glu Arg Ser Glu Tyr Leu	
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Val Thr Ala Leu	Glu Pro Asp Ser Pro Tyr Lys Val Cys Met Val	
470	475	480
Pro Met Glu Thr	Ser Asn Leu Tyr Leu Phe Asp Glu Thr Pro Val	
485	490	495
Cys Ile Glu Thr	Glu Thr Ala Pro Leu Arg Met Tyr Asn Pro Thr	
500	505	510
Thr Thr Leu Asn	Arg Glu Gln Glu Lys Glu Pro Tyr Lys Asn Pro	
515	520	525
Asn Leu Pro Leu	Ala Ala Ile Ile Gly Gly Ala Val Ala Leu Val	
530	535	540
Thr Ile Ala Leu	Leu Ala Leu Val Cys Trp Tyr Val His Arg Asn	

	545		550		555
Gly Ser Leu Phe	Ser Arg Asn Cys Ala	Tyr Ser Lys Gly Arg Arg			
	560	565	570		
Arg Lys Asp Asp	Tyr Ala Glu Ala Gly	Thr Lys Lys Asp Asn Ser			
	575	580	585		
Ile Leu Glu Ile	Arg Glu Thr Ser Phe	Gln Met Leu Pro Ile Ser			
	590	595	600		
Asn Glu Pro Ile	Ser Lys Glu Glu Phe	Val Ile His Thr Ile Phe			
	605	610	615		
Pro Pro Asn Gly	Met Asn Leu Tyr Lys	Asn Asn His Ser Glu Ser			
	620	625	630		
Ser Ser Asn Arg	Ser Tyr Arg Asp Ser	Gly Ile Pro Asp Ser Asp			
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His Ser His Ser					

<210> 133

<211> 1882

<212> DNA

<213> Homo Sapien

<400> 133

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<210> 134

<211> 440

<212> PRT

<213> Homo Sapien

<400> 134

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				20					25					30

Thr	Ser	Ser	Glu	Gln	Arg	Pro	Ala	Met	Ala	Ser	Leu	Gly	Leu	Leu	35	40	45
Leu	Leu	Leu	Leu	Leu	Thr	Ala	Leu	Pro	Pro	Leu	Trp	Ser	Ser	Ser	50	55	60
Leu	Pro	Gly	Leu	Asp	Thr	Ala	Glu	Ser	Lys	Ala	Thr	Ile	Ala	Asp	65	70	75
Leu	Ile	Leu	Ser	Ala	Leu	Glu	Arg	Ala	Thr	Val	Phe	Leu	Glu	Gln	80	85	90
Arg	Leu	Pro	Glu	Ile	Asn	Leu	Asp	Gly	Met	Val	Gly	Val	Arg	Val	95	100	105
Leu	Glu	Glu	Gln	Leu	Lys	Ser	Val	Arg	Glu	Lys	Trp	Ala	Gln	Glu	110	115	120
Pro	Leu	Leu	Gln	Pro	Leu	Ser	Leu	Arg	Val	Gly	Met	Leu	Gly	Glu	125	130	135
Lys	Leu	Glu	Ala	Ala	Ile	Gln	Arg	Ser	Leu	His	Tyr	Leu	Lys	Leu	140	145	150
Ser	Asp	Pro	Lys	Tyr	Leu	Arg	Glu	Phe	Gln	Leu	Thr	Leu	Gln	Pro	155	160	165
Gly	Phe	Trp	Lys	Leu	Pro	His	Ala	Trp	Ile	His	Thr	Asp	Ala	Ser	170	175	180
Leu	Val	Tyr	Pro	Thr	Phe	Gly	Pro	Gln	Asp	Ser	Phe	Ser	Glu	Glu	185	190	195
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Ser	Ser	Glu	Pro	Cys	Gly	Leu	Ser	Asp	Leu	Cys	Arg	Ser	Leu	Met	215	220	225
Thr	Lys	Pro	Gly	Cys	Ser	Gly	Tyr	Cys	Leu	Ser	His	Gln	Leu	Leu	230	235	240
Phe	Phe	Leu	Trp	Ala	Arg	Met	Arg	Gly	Cys	Thr	Gln	Gly	Pro	Leu	245	250	255
Gln	Gln	Ser	Gln	Asp	Tyr	Ile	Asn	Leu	Phe	Cys	Ala	Asn	Met	Met	260	265	270
Asp	Leu	Asn	Arg	Arg	Ala	Glu	Ala	Ile	Gly	Tyr	Ala	Tyr	Pro	Thr	275	280	285
Arg	Asp	Ile	Phe	Met	Glu	Asn	Ile	Met	Phe	Cys	Gly	Met	Gly	Gly	290	295	300
Phe	Ser	Asp	Phe	Tyr	Lys	Leu	Arg	Trp	Leu	Glu	Ala	Ile	Leu	Ser	305	310	315

Trp	Gln	Lys	Gln	Gln	Glu	Gly	Cys	Phe	Gly	Glu	Pro	Asp	Ala	Glu	
			320						325					330	
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			335						340					345	
Arg	Arg	Val	Lys	Arg	Arg	Glu	Lys	Gln	Phe	Pro	Asp	Ser	Arg	Ser	
			350						355					360	
Val	Ala	Gln	Ala	Gly	Val	Gln	Trp	Arg	Asn	Leu	Gly	Ser	Leu	Gln	
			365						370					375	
Pro	Leu	Pro	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ile	Leu	Pro	
			380						385					390	
Ser	Ser	Trp	Asp	Tyr	Arg	Ser	Val	Pro	Pro	Tyr	Leu	Ala	Asn	Phe	
			395						400					405	
Tyr	Ile	Phe	Leu	Val	Glu	Thr	Gly	Phe	His	His	Val	Ala	His	Ala	
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Gly	Leu	Glu	Leu	Leu	Ile	Ser	Arg	Asp	Pro	Pro	Thr	Ser	Gly	Ser	
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Gln	Ser	Val	Gly	Leu											
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<210> 135

<211> 884

<212> DNA

<213> Homo Sapien

<400> 135

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	200		205		210
Ser Glu Phe Met Thr Arg Leu Phe Ser Ser Lys Ser Ser Gly Lys					
	215		220		225
Ser Ser Ser Gly Ser Ser Lys Thr Gly Lys Ser Gly Ala Gly Lys					
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Arg Arg

<210> 137

<211> 1571

<212> DNA

<213> Homo Sapien

<400> 137

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<210> 138
 <211> 261
 <212> PRT
 <213> Homo Sapien

<400> 138
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 35 40 45
 Gly Ala Thr Thr Cys Ala Thr Asn Ser His Ser Asp Ser Glu Leu
 50 55 60
 Arg Pro Glu Ile Phe Ser Ser Arg Glu Ala Trp Gln Phe Phe Leu
 65 70 75
 Leu Leu Trp Ser Pro Asp Phe Arg Pro Lys Met Lys Ala Ser Ser
 80 85 90
 Leu Ala Phe Ser Leu Leu Ser Ala Ala Phe Tyr Leu Leu Trp Thr
 95 100 105
 Pro Ser Thr Gly Leu Lys Thr Leu Asn Leu Gly Ser Cys Val Ile
 110 115 120
 Ala Thr Asn Leu Gln Glu Ile Arg Asn Gly Phe Ser Glu Ile Arg
 125 130 135
 Gly Ser Val Gln Ala Lys Asp Gly Asn Ile Asp Ile Arg Ile Leu

140	145	150
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155	160	165
Cys Leu Leu Arg His Leu Leu Arg Leu Tyr Leu Asp Arg Val Phe		
170	175	180
Lys Asn Tyr Gln Thr Pro Asp His Tyr Thr Leu Arg Lys Ile Ser		
185	190	195
Ser Leu Ala Asn Ser Phe Leu Thr Ile Lys Lys Asp Leu Arg Leu		
200	205	210
Ser His Ala His Met Thr Cys His Cys Gly Glu Glu Ala Met Lys		
215	220	225
Lys Tyr Ser Gln Ile Leu Ser His Phe Glu Lys Leu Glu Pro Gln		
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<210> 139
 <211> 2395
 <212> DNA
 <213> Homo Sapien

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<210> 140

<211> 310

<212> PRT

<213> Homo Sapien

<400> 140

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Pro	Val	Arg	Ser	Ser	Ala	Arg	Ala	Glu	His	Gly	Ala	Glu	Pro	Pro
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Ala	Pro	Glu	Pro	Ser	Ala	Gly	Ala	Ser	Ser	Asn	Trp	Thr	Thr	Leu
			50						55					60

Pro	Pro	Pro	Leu	Phe	Ser	Lys	Val	Val	Ile	Val	Leu	Ile	Asp	Ala
			65						70					75

Leu	Arg	Asp	Asp	Phe	Val	Phe	Gly	Ser	Lys	Gly	Val	Lys	Phe	Met
			80						85					90

Pro	Tyr	Thr	Thr	Tyr	Leu	Val	Glu	Lys	Gly	Ala	Ser	His	Ser	Phe
			95						100					105

Val	Ala	Glu	Ala	Lys	Pro	Pro	Thr	Val	Thr	Met	Pro	Arg	Ile	Lys
			110						115					120

Ala	Leu	Met	Thr	Gly	Ser	Leu	Pro	Gly	Phe	Val	Asp	Val	Ile	Arg
			125						130					135

Asn	Leu	Asn	Ser	Pro	Ala	Leu	Leu	Glu	Asp	Ser	Val	Ile	Arg	Gln
			140						145					150

Ala	Lys	Ala	Ala	Gly	Lys	Arg	Ile	Val	Phe	Tyr	Gly	Asp	Glu	Thr
			155						160					165

Trp	Val	Lys	Leu	Phe	Pro	Lys	His	Phe	Val	Glu	Tyr	Asp	Gly	Thr
			170						175					180

Thr	Ser	Phe	Phe	Val	Ser	Asp	Tyr	Thr	Glu	Val	Asp	Asn	Asn	Val
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

	185		190		195
Thr Arg His Leu Asp Lys Val Leu Lys Arg Gly Asp Trp Asp Ile					
	200		205		210
Leu Ile Leu His Tyr Leu Gly Leu Asp His Ile Gly His Ile Ser					
	215		220		225
Gly Pro Asn Ser Pro Leu Ile Gly Gln Lys Leu Ser Glu Met Asp					
	230		235		240
Ser Val Leu Met Lys Ile His Thr Ser Leu Gln Ser Lys Glu Arg					
	245		250		255
Glu Thr Pro Leu Pro Asn Leu Leu Val Leu Cys Gly Asp His Gly					
	260		265		270
Met Ser Glu Thr Gly Ser His Gly Ala Ser Ser Thr Glu Glu Val					
	275		280		285
Asn Thr Pro Leu Ile Leu Ile Ser Ser Ala Phe Glu Arg Lys Pro					
	290		295		300
Gly Asp Ile Arg His Pro Lys His Val Gln					
	305		310		

<210> 141

<211> 754

<212> DNA

<213> Homo Sapien

<400> 141

ggcacgagggc aagccttcca gggttatcgtg acgcaccttg aaagtctgag 50

agctactgcc ctacagaaag ttactagtgc cctaaagctg gcgctggcac 100

tgatgttact gctgctgttg gagtacaact tccctataga aaacaactgc 150

cagcacctta agaccactca caccttcaga gtgaagaact taaacccgaa 200

gaaattcagc attcatgacc aggatcacaa agtactgggc ctggactctg 250

ggaatctcat agcagttcca gataaaaact acatacgccc agagatcttc 300

tttgcattag cctcatcctt gagctcagcc tctgcggaga aaggaagtcc 350

gattctcctg ggggtctcta aaggggagtt ttgtctctac tgtgacaagg 400

ataaaggaca aagtcattcca tcccttcagc tgaagaagga gaaactgatg 450

aagctggctg cccaaaagga atcagcacgc cggcccttca tcttttatag 500

ggctcaggtg ggctcctgga acatgctgga gtcggcggct caccctcgat 550

ggttcatctg cacctcctgc aattgtaatg agcctgttgg ggtgacagat 600

aaatttgaga acaggaaaca cattgaattt tcatttcaac cagtttgcaa 650

agctgaaatg agccccagtg aggtcagcga ttaggaaact gccccattga 700

acgccttctc cgctaatttg aactaattgt ataaaaacac caaacctgct 750

cact 754

<210> 142

<211> 193

<212> PRT

<213> Homo Sapien

<400> 142

Met	Leu	Leu	Leu	Leu	Leu	Glu	Tyr	Asn	Phe	Pro	Ile	Glu	Asn	Asn
1				5					10				15	

Cys	Gln	His	Leu	Lys	Thr	Thr	His	Thr	Phe	Arg	Val	Lys	Asn	Leu
				20					25				30	

Asn	Pro	Lys	Lys	Phe	Ser	Ile	His	Asp	Gln	Asp	His	Lys	Val	Leu
				35					40				45	

Val	Leu	Asp	Ser	Gly	Asn	Leu	Ile	Ala	Val	Pro	Asp	Lys	Asn	Tyr
				50					55				60	

Ile	Arg	Pro	Glu	Ile	Phe	Phe	Ala	Leu	Ala	Ser	Ser	Leu	Ser	Ser
				65					70				75	

Ala	Ser	Ala	Glu	Lys	Gly	Ser	Pro	Ile	Leu	Leu	Gly	Val	Ser	Lys
				80					85				90	

Gly	Glu	Phe	Cys	Leu	Tyr	Cys	Asp	Lys	Asp	Lys	Gly	Gln	Ser	His
				95					100				105	

Pro	Ser	Leu	Gln	Leu	Lys	Lys	Glu	Lys	Leu	Met	Lys	Leu	Ala	Ala
				110					115				120	

Gln	Lys	Glu	Ser	Ala	Arg	Arg	Pro	Phe	Ile	Phe	Tyr	Arg	Ala	Gln
				125					130				135	

Val	Gly	Ser	Trp	Asn	Met	Leu	Glu	Ser	Ala	Ala	His	Pro	Gly	Trp
				140					145				150	

Phe	Ile	Cys	Thr	Ser	Cys	Asn	Cys	Asn	Glu	Pro	Val	Gly	Val	Thr
				155					160				165	

Asp	Lys	Phe	Glu	Asn	Arg	Lys	His	Ile	Glu	Phe	Ser	Phe	Gln	Pro
				170					175				180	

Val	Cys	Lys	Ala	Glu	Met	Ser	Pro	Ser	Glu	Val	Ser	Asp		
				185					190					

<210> 143

<211> 961

<212> DNA

<213> Homo Sapien

<400> 143

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 ctgttgccag tgtggggtga gacaagtttg tcccacaggg ctgtctgagc 150
 agataagatt aagggctggg tctgtgctca attaactcct gtgggcacgg 200
 gggctgggaa gagcaaagtc agcgggtgcct acagtcagca ccatgctggg 250
 cctgccgtgg aagggaggtc tgtcctgggc gctgctgctg cttctcttag 300
 gctcccagat cctgctgac tatgcctggc atttccacga gcaaagggac 350
 tgtgatgaac acaatgtcat ggctcgttac ctccctgcca cagtggagtt 400
 tgctgtccac acattcaacc aacagagcaa ggactactat gcctacagac 450
 tggggcacat cttgaattcc tggaaggagc aggtggagtc caagactgta 500
 ttctcaatgg agctactgct ggggagaact aggtgtggga aatttgaaga 550
 cgacattgac aactgccatt tccaagaaag cacagagctg aacaatactt 600
 tcacctgctt cttcaccatc agcaccaggc cctggatgac tcagttcagc 650
 ctctgaaca agacctgctt ggagggattc cactgagtga aaccactca 700
 caggcttgct catgtgctgc tcccacattc cgtggacatc agcactactc 750
 tctgaggac tcttcagtgg ctgagcagct ttggacttgt ttgttatcct 800
 attttgcattg tgtttgagat ctgagatcag tgttttagaa aatccacaca 850
 tcttgagcct aatcatgtag tgtagatcat taaacatcag cattttaaga 900
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 950
 aaaaaaaaaa a 961

<210> 144

<211> 147

<212> PRT

<213> Homo Sapien

<400> 144

Met	Leu	Gly	Leu	Pro	Trp	Lys	Gly	Gly	Leu	Ser	Trp	Ala	Leu	Leu
1				5					10				15	

Leu	Leu	Leu	Leu	Gly	Ser	Gln	Ile	Leu	Leu	Ile	Tyr	Ala	Trp	His
				20				25					30	

Phe	His	Glu	Gln	Arg	Asp	Cys	Asp	Glu	His	Asn	Val	Met	Ala	Arg
				35				40					45	

Tyr	Leu	Pro	Ala	Thr	Val	Glu	Phe	Ala	Val	His	Thr	Phe	Asn	Gln
				50				55					60	

Gln	Ser	Lys	Asp	Tyr	Tyr	Ala	Tyr	Arg	Leu	Gly	His	Ile	Leu	Asn	
				65					70					75	
Ser	Trp	Lys	Glu	Gln	Val	Glu	Ser	Lys	Thr	Val	Phe	Ser	Met	Glu	
				80					85					90	
Leu	Leu	Leu	Gly	Arg	Thr	Arg	Cys	Gly	Lys	Phe	Glu	Asp	Asp	Ile	
				95					100					105	
Asp	Asn	Cys	His	Phe	Gln	Glu	Ser	Thr	Glu	Leu	Asn	Asn	Thr	Phe	
				110					115					120	
Thr	Cys	Phe	Phe	Thr	Ile	Ser	Thr	Arg	Pro	Trp	Met	Thr	Gln	Phe	
				125					130					135	
Ser	Leu	Leu	Asn	Lys	Thr	Cys	Leu	Glu	Gly	Phe	His				
				140					145						

<210> 145
 <211> 1157
 <212> DNA
 <213> Homo Sapien

<400> 145
 ctgtgcagct cgaggctcca gaggcacact ccagagagag ccaagggttct 50
 gacgcgatga ggaagcacct gagctggtgg tggtggcca ctgtctgcat 100
 gctgctcttc agccacctct ctgcggtcca gacgaggggc atcaagcaca 150
 gaatcaagtg gaaccggaag gccctgcca gcaactgcca gatcactgag 200
 gccaggtgg ctgagaaccg cccgggagcc ttcattcaagc aaggccgcaa 250
 gctcgacatt gacttcggag ccgagggcaa caggtactac gaggccaact 300
 actggcagtt ccccgatggc atccactaca acggctgctc tgaggctaata 350
 gtgaccaagg aggcatttgt caccggctgc atcaatgcca cccaggcggc 400
 gaaccagggg gagttccaga agccagacaa caagctccac cagcaggtgc 450
 tctggcggct ggtccaggag ctctgctccc tcaagcattg cgagttttgg 500
 ttggagaggg gcgcaggact tcgggtcacc atgcaccagc cagtgtctct 550
 ctgccttctg gctttgatct ggctcatggg gaaataagct tgccaggagg 600
 ctggcagtag agagcgcagc agcgagcaaa tcctggcaag tgaccagct 650
 cttctcccc aaaccacgc gtgttctgaa ggtgcccagg agcggcgatg 700
 cactcgact gcaaatgccg ctcccacgta tgcgccctgg tatgtgctg 750
 cgttctgata gatgggggac tgtggcttct ccgtcactcc attctcagcc 800
 cctagcagag cgtctggcac actagattag tagtaaatgc ttgatgagaa 850

gaacacatca ggcactgcgc cacctgcttc acagtacttc ccaacaactc 900
 ttagaggtag gtgtattccc gttttacaga taaggaaact gaggcccaga 950
 gagctgaagt actgcaccca gcatcaccag ctagaaagtg gcagagccag 1000
 gattcaaccc tggtttgtct aaccccaggt tttctgctct gtccaattcc 1050
 agagctgtct ggtgatcact ttatgtctca cagggaccca catccaaaca 1100
 tgtatctcta atgaaattgt gaaagctcca tgtttagaaa taaatgaaaa 1150
 cacctga 1157

<210> 146

<211> 176

<212> PRT

<213> Homo Sapien

<400> 146

Met	Arg	Lys	His	Leu	Ser	Trp	Trp	Trp	Leu	Ala	Thr	Val	Cys	Met
1				5					10					15
Leu	Leu	Phe	Ser	His	Leu	Ser	Ala	Val	Gln	Thr	Arg	Gly	Ile	Lys
				20					25					30
His	Arg	Ile	Lys	Trp	Asn	Arg	Lys	Ala	Leu	Pro	Ser	Thr	Ala	Gln
				35					40					45
Ile	Thr	Glu	Ala	Gln	Val	Ala	Glu	Asn	Arg	Pro	Gly	Ala	Phe	Ile
				50					55					60
Lys	Gln	Gly	Arg	Lys	Leu	Asp	Ile	Asp	Phe	Gly	Ala	Glu	Gly	Asn
				65					70					75
Arg	Tyr	Tyr	Glu	Ala	Asn	Tyr	Trp	Gln	Phe	Pro	Asp	Gly	Ile	His
				80					85					90
Tyr	Asn	Gly	Cys	Ser	Glu	Ala	Asn	Val	Thr	Lys	Glu	Ala	Phe	Val
				95					100					105
Thr	Gly	Cys	Ile	Asn	Ala	Thr	Gln	Ala	Ala	Asn	Gln	Gly	Glu	Phe
				110					115					120
Gln	Lys	Pro	Asp	Asn	Lys	Leu	His	Gln	Gln	Val	Leu	Trp	Arg	Leu
				125					130					135
Val	Gln	Glu	Leu	Cys	Ser	Leu	Lys	His	Cys	Glu	Phe	Trp	Leu	Glu
				140					145					150
Arg	Gly	Ala	Gly	Leu	Arg	Val	Thr	Met	His	Gln	Pro	Val	Leu	Leu
				155					160					165
Cys	Leu	Leu	Ala	Leu	Ile	Trp	Leu	Met	Val	Lys				
				170					175					

<210> 147
 <211> 333
 <212> DNA
 <213> Homo Sapien

<400> 147
 gccttgccct cccaaagggc tgggattata ggcgtgacca ccatgtctgg 50
 tccagagtct catttctga tgatttatag actcaaagaa aactcatgtt 100
 cagaagctct cttctcttct ggctctctct ctgtcttctt tccctctttc 150
 ttcttatttt aattagtagc atctactcag agtcatgcaa gctggaaatc 200
 ttctattttg cttgtcagtg gggtaggtca ctgagtcctta gtttttattt 250
 tttgaaattt caactttcag attcaggggg tacatgtgaa ggtttgtttt 300
 atgagtatat tgcattgatgc tgagggttgg ggt 333

<210> 148
 <211> 73
 <212> PRT
 <213> Homo Sapien

<400> 148
 Met Phe Arg Ser Ser Leu Leu Phe Trp Pro Pro Leu Cys Leu Leu
 1 5 10 15
 Ser Leu Phe Leu Leu Ile Leu Ile Ser Ser Ile Tyr Ser Glu Ser
 20 25 30
 Cys Lys Leu Glu Ile Phe His Phe Ala Cys Gln Trp Gly Arg Ser
 35 40 45
 Leu Ser Leu Ser Phe Tyr Phe Leu Lys Phe Gln Leu Ser Asp Ser
 50 55 60
 Gly Gly Thr Cys Glu Gly Leu Phe Tyr Glu Tyr Ile Ala
 65 70

<210> 149
 <211> 1893
 <212> DNA
 <213> Homo Sapien

<400> 149
 gtctccgcgt cacaggaact tcagcaccca cagggcggac agcgctcccc 50
 tctacctgga gacttgactc ccgcgcgccc caacctgct tatcccttga 100
 ccgtcgagtg tcagagatcc tgcagccgcc cagtcccggc cctctctccg 150
 cccacacccc accctcttgg ctcttctgt ttttactcct ccttttcatt 200
 cataacaaaa gctacagctc caggagccca gcgcggggct gtgaccaag 250

ccgagcgtgg aagaatgggg ttccctcgga ccggcacttg gattctggtg 300
 ttagtgctcc cgattcaagc tttcccaaaa cctggaggaa gccaaagaaa 350
 atctctacat aatagagaat taagtgcaga aagacctttg aatgaacaga 400
 ttgctgaagc agaagaagac aagattaaaa aaacatatcc tccagaaaac 450
 aagccaggtc agagcaacta ttcttttggt gataacttga acctgctaaa 500
 ggcaataaca gaaaaggaaa aaattgagaa agaaagacaa tctataagaa 550
 gctccccact tgataataag ttgaatgtgg aagatgttga ttcaaccaag 600
 aatcgaaaac tgatcgatga ttatgactct actaagagtg gattggatca 650
 taaatttcaa gatgatccag atggtcttca tcaactagac gggactcctt 700
 taaccgctga agacattgtc cataaaatcg ctgccaggat ttatgaagaa 750
 aatgacagag ccgtgtttga caagattggt tctaaactac ttaatctcgg 800
 ccttatcaca gaaagccaag cacatacact ggaagatgaa gtagcagagg 850
 ttttacaaaa attaattctc aaggaagcca acaattatga ggaggatccc 900
 aataagccca caagctggac tgagaatcag gctggaaaaa taccagagaa 950
 agtgactcca atggcagcaa ttcaagatgg tcttgctaag ggagaaaacg 1000
 atgaaacagt atctaacaca ttaaccttga caaatggctt ggaaaggaga 1050
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 tttctatgcg ctactgaaaa gtattgatcc agaaaaagaa gcaaaaagaga 1150
 aagaaacact gattactatc atgaaaacac tgattgactt tgtgaagatg 1200
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 aaacttgatg gaaatgattg ctcttcagac caaaaacaag ctagaaaaaa 1300
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 atatggaagc ttgaaggatt ccacaaaaga tgataactcc aaccaggag 1450
 gaaagacaga tgaacccaaa ggaaaaacag aagcctatct ggaagccatc 1500
 agaaaaaata ttgaatggtt gaagaaacat gacaaaaagg gaaataaaga 1550
 agattatgac ctttcaaaga tgagagactt catcaataaa caagctgatg 1600
 cttatgtgga gaaaggcatc cttgacaagg aagaagccga ggccatcaag 1650
 cgcatttata gcagcctgta aaaatggcaa aagatccagg agtctttcaa 1700

ctgtttcaga aaacataata tagcttaaaa cacttctaata tctgtgatta 1750
aaatTTTTtg acccaagggt tattagaaag tgctgaattt acagtagtta 1800
acctttttaca agtggttaaa acatagcttt cttcccgtaa aaactatctg 1850
aaagtaaagt tgtatgtaag ctgaaaaaaaa aaaaaaaaaa aaa 1893

<210> 150
<211> 468
<212> PRT
<213> Homo Sapien

<400> 150
Met Gly Phe Leu Gly Thr Gly Thr Trp Ile Leu Val Leu Val Leu
1 5 10 15
Pro Ile Gln Ala Phe Pro Lys Pro Gly Gly Ser Gln Asp Lys Ser
20 25 30
Leu His Asn Arg Glu Leu Ser Ala Glu Arg Pro Leu Asn Glu Gln
35 40 45
Ile Ala Glu Ala Glu Glu Asp Lys Ile Lys Lys Thr Tyr Pro Pro
50 55 60
Glu Asn Lys Pro Gly Gln Ser Asn Tyr Ser Phe Val Asp Asn Leu
65 70 75
Asn Leu Leu Lys Ala Ile Thr Glu Lys Glu Lys Ile Glu Lys Glu
80 85 90
Arg Gln Ser Ile Arg Ser Ser Pro Leu Asp Asn Lys Leu Asn Val
95 100 105
Glu Asp Val Asp Ser Thr Lys Asn Arg Lys Leu Ile Asp Asp Tyr
110 115 120
Asp Ser Thr Lys Ser Gly Leu Asp His Lys Phe Gln Asp Asp Pro
125 130 135
Asp Gly Leu His Gln Leu Asp Gly Thr Pro Leu Thr Ala Glu Asp
140 145 150
Ile Val His Lys Ile Ala Ala Arg Ile Tyr Glu Glu Asn Asp Arg
155 160 165
Ala Val Phe Asp Lys Ile Val Ser Lys Leu Leu Asn Leu Gly Leu
170 175 180
Ile Thr Glu Ser Gln Ala His Thr Leu Glu Asp Glu Val Ala Glu
185 190 195
Val Leu Gln Lys Leu Ile Ser Lys Glu Ala Asn Asn Tyr Glu Glu
200 205 210
Asp Pro Asn Lys Pro Thr Ser Trp Thr Glu Asn Gln Ala Gly Lys

	215		220		225
Ile Pro Glu Lys Val Thr Pro Met Ala	Ala Ile Gln Asp Gly Leu				
230	235				240
Ala Lys Gly Glu Asn Asp Glu Thr Val Ser Asn Thr Leu Thr Leu					
245	250				255
Thr Asn Gly Leu Glu Arg Arg Thr Lys Thr Tyr Ser Glu Asp Asn					
260	265				270
Phe Glu Glu Leu Gln Tyr Phe Pro Asn Phe Tyr Ala Leu Leu Lys					
275	280				285
Ser Ile Asp Ser Glu Lys Glu Ala Lys Glu Lys Glu Thr Leu Ile					
290	295				300
Thr Ile Met Lys Thr Leu Ile Asp Phe Val Lys Met Met Val Lys					
305	310				315
Tyr Gly Thr Ile Ser Pro Glu Glu Gly Val Ser Tyr Leu Glu Asn					
320	325				330
Leu Asp Glu Met Ile Ala Leu Gln Thr Lys Asn Lys Leu Glu Lys					
335	340				345
Asn Ala Thr Asp Asn Ile Ser Lys Leu Phe Pro Ala Pro Ser Glu					
350	355				360
Lys Ser His Glu Glu Thr Asp Ser Thr Lys Glu Glu Ala Ala Lys					
365	370				375
Met Glu Lys Glu Tyr Gly Ser Leu Lys Asp Ser Thr Lys Asp Asp					
380	385				390
Asn Ser Asn Pro Gly Gly Lys Thr Asp Glu Pro Lys Gly Lys Thr					
395	400				405
Glu Ala Tyr Leu Glu Ala Ile Arg Lys Asn Ile Glu Trp Leu Lys					
410	415				420
Lys His Asp Lys Lys Gly Asn Lys Glu Asp Tyr Asp Leu Ser Lys					
425	430				435
Met Arg Asp Phe Ile Asn Lys Gln Ala Asp Ala Tyr Val Glu Lys					
440	445				450
Gly Ile Leu Asp Lys Glu Glu Ala Glu Ala Ile Lys Arg Ile Tyr					
455	460				465

Ser Ser Leu

<210> 151
 <211> 2598
 <212> DNA
 <213> Homo Sapien

<400> 151

cggctcgagg ctcccgccag gagaaaggaa cattctgagg ggagtctaca 50
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aggactcggc attgaaggtg ctttatctgc ataataacca gcttctagct 150
ggagggctgc atgcagggaa ggtcattaaa ggtgaagaga tcagcgtggt 200
ccccaatcgg tggctggatg ccagcctgtc ccccgtcac ctaggtgtcc 250
agggtggaag ccagtgcctg tcatgtgggg tggggcagga gccgactcta 300
aactagagc cagtgaacat catggagctc tatcttggtg ccaaggaatc 350
caagagcttc accttctacc ggcgggacat ggggctcacc tccagcttcg 400
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cagcctgtca gactcaccca gcttcccag aatggtggct ggaatgcccc 500
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gaactccctg ggcagagcca gctcgggtga ggggtgagtg gaggagacc 600
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tgggcacctg accactttgt cttctggttc ccagtttga taaattctga 700
gatttgagc tcagtccacg gtcctcccc actggatggt gctactgctg 750
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gtaactgaca agtggttacc tgagccccgc aggccaacc atccccagtt 900
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cctatctctt cctcatcat cttgttggtg gcatgaggag gtggtgatgt 1100
cagaagaaat ggctcgagct cagaagataa aagataagta gggtatgctg 1150
atcctctttt aaaaacccaa gataaatca aaatcccaga tgctggtctc 1200
tattcccatg aaaaagtgt catgacatat tgagaagacc tacttacaaa 1250
gtggcatata ttgcaattta ttttaattaa aagataccta tttatatatt 1300
tctttataga aaaaagtctg gaagagttta cttcaattgt agcaatgtca 1350
gggtgggtggc agtatagggt atttttcttt taattctgtt aatttatctg 1400

tatttctctaa ttttcttaca atgaagatga attccttgta taaaaataag 1450
aaaagaaatt aatcttgagg taagcagagc agacatcatc tctgattgtc 1500
ctcagcctcc acttccccag agtaaattca aattgaatcg agctctgctg 1550
ctctgggttg ttgtagtagt gatcaggaaa cagatctcag caaagccact 1600
gaggaggagg ctgtgctgag tttgtgtggc tggaatctct gggtaaggaa 1650
cttaaagaac aaaaatcatc tggttaattct ttcctagaag gatcacagcc 1700
cctgggattc caaggcattg gatccagtct ctaagaaggc tgctgtactg 1750
gttgaattgt gtccccctca aattcacatc cttcttgga tctcagtctg 1800
tgagtttatt tggagataag gtctctgcag atgtagttag ttaagacaag 1850
gtcatgctgg atgaaggtag acctaaattc aatatgactg gtttcttctg 1900
atgaaaagga gaggacacag agacagagga gacgcgggga agactatgta 1950
aagatgaagg cagagatcgg agttttgcag ccacaagcta agaaacacca 2000
aggattgtgg caaccatcag aagcttgga gaggcaaaga agaattcttc 2050
cctagaggct ttagagggat aacggctctg ctgaaacctt aatctcagac 2100
ttccagcctc ctgaacgaag aaagaataaa tttcggctgt tttaagccac 2150
caaggataat tggttacagc agctctagga aactaataca gctgctaaaa 2200
tgatccctgt ctctcgtgt ttacattctg tgtgtgtccc ctcccacaat 2250
gtaccaaagt tgtctttgtg accaatagaa tatggcagaa gtgatggcat 2300
gccacttcca agattaggtt ataaaagaca ctgcagcttc tacttgagcc 2350
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ggctctaactt gttatgcagc aatagataaa taatatgcag agaaagag 2598

<210> 152

<211> 155

<212> PRT

<213> Homo Sapien

<400> 152

Met	Val	Leu	Ser	Gly	Ala	Leu	Cys	Phe	Arg	Met	Lys	Asp	Ser	Ala
1					5				10					15

Leu	Lys	Val	Leu	Tyr	Leu	His	Asn	Asn	Gln	Leu	Leu	Ala	Gly	Gly
				20					25					30
Leu	His	Ala	Gly	Lys	Val	Ile	Lys	Gly	Glu	Glu	Ile	Ser	Val	Val
				35					40					45
Pro	Asn	Arg	Trp	Leu	Asp	Ala	Ser	Leu	Ser	Pro	Val	Ile	Leu	Gly
				50					55					60
Val	Gln	Gly	Gly	Ser	Gln	Cys	Leu	Ser	Cys	Gly	Val	Gly	Gln	Glu
				65					70					75
Pro	Thr	Leu	Thr	Leu	Glu	Pro	Val	Asn	Ile	Met	Glu	Leu	Tyr	Leu
				80					85					90
Gly	Ala	Lys	Glu	Ser	Lys	Ser	Phe	Thr	Phe	Tyr	Arg	Arg	Asp	Met
				95					100					105
Gly	Leu	Thr	Ser	Ser	Phe	Glu	Ser	Ala	Ala	Tyr	Pro	Gly	Trp	Phe
				110					115					120
Leu	Cys	Thr	Val	Pro	Glu	Ala	Asp	Gln	Pro	Val	Arg	Leu	Thr	Gln
				125					130					135
Leu	Pro	Glu	Asn	Gly	Gly	Trp	Asn	Ala	Pro	Ile	Thr	Asp	Phe	Tyr
				140					145					150
Phe	Gln	Gln	Cys	Asp										
				155										

<210> 153

<211> 1152

<212> DNA

<213> Homo Sapien

<400> 153

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gcagctgcgc ccatcagctc ccaactgcagg cttgacaagt ccaacttcca 200
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gaaggacaca gtgaaaaagc ttggagagag ttggagagatc aaagcaattg 550

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 cc 1152

<210> 154
 <211> 179
 <212> PRT
 <213> Homo Sapien

<400> 154
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 Leu Ala Thr Ser Cys Leu Leu Leu Leu Ala Leu Leu Val Gln Gly
 20 25 30
 Gly Ala Ala Ala Pro Ile Ser Ser His Cys Arg Leu Asp Lys Ser
 35 40 45
 Asn Phe Gln Gln Pro Tyr Ile Thr Asn Arg Thr Phe Met Leu Ala
 50 55 60
 Lys Glu Ala Ser Leu Ala Asp Asn Asn Thr Asp Val Arg Leu Ile
 65 70 75
 Gly Glu Lys Leu Phe His Gly Val Ser Met Ser Glu Arg Cys Tyr
 80 85 90
 Leu Met Lys Gln Val Leu Asn Phe Thr Leu Glu Glu Val Leu Phe
 95 100 105
 Pro Gln Ser Asp Arg Phe Gln Pro Tyr Met Gln Glu Val Val Pro
 110 115 120

Phe	Leu	Ala	Arg	Leu	Ser	Asn	Arg	Leu	Ser	Thr	Cys	His	Ile	Glu
				125					130					135
Gly	Asp	Asp	Leu	His	Ile	Gln	Arg	Asn	Val	Gln	Lys	Leu	Lys	Asp
				140					145					150
Thr	Val	Lys	Lys	Leu	Gly	Glu	Ser	Gly	Glu	Ile	Lys	Ala	Ile	Gly
				155					160					165
Glu	Leu	Asp	Leu	Leu	Phe	Met	Ser	Leu	Arg	Asn	Ala	Cys	Ile	
				170					175					

<210> 155
 <211> 1320
 <212> DNA
 <213> Homo Sapien

<400> 155
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 cccagcatgt accaggtcag tgcagagggc tgcctgaggg ctgtgctgag 150
 agggagagga gcagagatgc tgctgagggg ggaggagggc caagctgcca 200
 ggtttggggc tgggggccaa gtggagttag aaactgggat cccaggggga 250
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 ctgaggagct gctgaggtgg agcactgtgc ctgtgcctcc cctagagcct 450
 gctaggccca accgccaccc agagtctgtg agggccagtg aagatggacc 500
 cctcaacagc agggccatct cccctggag atatgagttg gacagagact 550
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 ccctggccca gcacaggcac tttctagata tttccccctt gctggagaag 1150
 aaagagcccc tggttttatt tgtttgttta ctcactactc agtgagcatc 1200
 tactttgggt gcattctagt gtagttacta gtcttttgac atggatgatt 1250
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 ctttatttaa aaatgaaaaa 1320

<210> 156

<211> 177

<212> PRT

<213> Homo Sapien

<400> 156

Met	Arg	Glu	Arg	Pro	Arg	Leu	Gly	Glu	Asp	Ser	Ser	Leu	Ile	Ser	1	5	10	15
Leu	Phe	Leu	Gln	Val	Val	Ala	Phe	Leu	Ala	Met	Val	Met	Gly	Thr	20	25	30	
His	Thr	Tyr	Ser	His	Trp	Pro	Ser	Cys	Cys	Pro	Ser	Lys	Gly	Gln	35	40	45	
Asp	Thr	Ser	Glu	Glu	Leu	Leu	Arg	Trp	Ser	Thr	Val	Pro	Val	Pro	50	55	60	
Pro	Leu	Glu	Pro	Ala	Arg	Pro	Asn	Arg	His	Pro	Glu	Ser	Cys	Arg	65	70	75	
Ala	Ser	Glu	Asp	Gly	Pro	Leu	Asn	Ser	Arg	Ala	Ile	Ser	Pro	Trp	80	85	90	
Arg	Tyr	Glu	Leu	Asp	Arg	Asp	Leu	Asn	Arg	Leu	Pro	Gln	Asp	Leu	95	100	105	
Tyr	His	Ala	Arg	Cys	Leu	Cys	Pro	His	Cys	Val	Ser	Leu	Gln	Thr	110	115	120	
Gly	Ser	His	Met	Asp	Pro	Arg	Gly	Asn	Ser	Glu	Leu	Leu	Tyr	His	125	130	135	
Asn	Gln	Thr	Val	Phe	Tyr	Arg	Arg	Pro	Cys	His	Gly	Glu	Lys	Gly	140	145	150	
Thr	His	Lys	Gly	Tyr	Cys	Leu	Glu	Arg	Arg	Leu	Tyr	Arg	Val	Ser	155	160	165	
Leu	Ala	Cys	Val	Cys	Val	Arg	Pro	Arg	Val	Met	Gly	170	175					

<210> 157
<211> 1515
<212> DNA
<213> Homo Sapien

<400> 157
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cagagtggat gctacaacat gatctaatacc ccggagactt gagggacctc 150
cgagtagaac ctgttacaac tagtggttgca acaggggact attcaatttt 200
gatgaatgta agctgggtac tccgggcaga tgccagcatc cgcttggtga 250
aggccaccaa gatttgtgtg acgggcaaaa gcaacttcca gtctacagc 300
tgtgtgaggt gcaattacac agaggccttc cagactcaga ccagaccctc 350
tggtggtaaa tggacatttt cctacatcgg ctccctgtga gagctgaaca 400
cagtctattt cattggggcc cataatatcc ctaatgcaa tatgaatgaa 450
gatggccctt ccatgtctgt gaatttcacc tcaccaggct gcctagacca 500
cataatgaaa tataaaaaaa agtgtgtcaa ggccggaagc ctgtgggatac 550
cgaacatcac tgcttgtaag aagaatgagg agacagtaga agtgaacttc 600
acaaccactc ccctgggaaa cagatacatg gctcttatcc aacacagcac 650
tatcatcggg ttttctcagg tgtttgagcc acaccagaag aaacaaacgc 700
gagcttcagt ggtgattcca gtgactgggg atagtgaagg tgctacggtg 750
cagctgactc catattttcc tacttggtggc agcgactgca tccgacataa 800
aggaacagtt gtgctctgcc cacaacagg cgtcccttcc cctctggata 850
acaacaaaag caagccggga ggctggctgc ctctcctcct gctgtctctg 900
ctggtggcca catgggtgct ggtggcaggg atctatctaa tgtggaggca 950
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cagtgagaac tctcaagacc tcttccccct tgcctttaac cttttctgca 1300

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gtaccacctc atgaaggatg ccaactgcttt ctgtgcagaa cttctccatg 1450
tcaagcagca ggtgtcagca ggaaaaagat cacaagcctg ccacgatggc 1500
tgctgctcct tgtag 1515

<210> 158
<211> 502
<212> PRT
<213> Homo Sapien

<400> 158
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Val Pro Arg Glu Pro Thr Val Gln Cys Gly Ser Glu Thr Gly Pro
20 25 30
Ser Pro Glu Trp Met Leu Gln His Asp Leu Ile Pro Gly Asp Leu
35 40 45
Arg Asp Leu Arg Val Glu Pro Val Thr Thr Ser Val Ala Thr Gly
50 55 60
Asp Tyr Ser Ile Leu Met Asn Val Ser Trp Val Leu Arg Ala Asp
65 70 75
Ala Ser Ile Arg Leu Leu Lys Ala Thr Lys Ile Cys Val Thr Gly
80 85 90
Lys Ser Asn Phe Gln Ser Tyr Ser Cys Val Arg Cys Asn Tyr Thr
95 100 105
Glu Ala Phe Gln Thr Gln Thr Arg Pro Ser Gly Gly Lys Trp Thr
110 115 120
Phe Ser Tyr Ile Gly Phe Pro Val Glu Leu Asn Thr Val Tyr Phe
125 130 135
Ile Gly Ala His Asn Ile Pro Asn Ala Asn Met Asn Glu Asp Gly
140 145 150
Pro Ser Met Ser Val Asn Phe Thr Ser Pro Gly Cys Leu Asp His
155 160 165
Ile Met Lys Tyr Lys Lys Lys Cys Val Lys Ala Gly Ser Leu Trp
170 175 180
Asp Pro Asn Ile Thr Ala Cys Lys Lys Asn Glu Glu Thr Val Glu
185 190 195
Val Asn Phe Thr Thr Thr Pro Leu Gly Asn Arg Tyr Met Ala Leu

	200		205		210
Ile Gln His Ser Thr	Ile Ile Gly Phe Ser Gln Val Phe Glu Pro				
	215		220		225
His Gln Lys Lys Gln Thr Arg Ala Ser	Val Val Ile Pro Val Thr				
	230		235		240
Gly Asp Ser Glu Gly Ala Thr Val Gln	Leu Thr Pro Tyr Phe Pro				
	245		250		255
Thr Cys Gly Ser Asp Cys Ile Arg His	Lys Gly Thr Val Val Leu				
	260		265		270
Cys Pro Gln Thr Gly Val Pro Phe Pro	Leu Asp Asn Asn Lys Ser				
	275		280		285
Lys Pro Gly Gly Trp Leu Pro Leu Leu	Leu Leu Ser Leu Leu Val				
	290		295		300
Ala Thr Trp Val Leu Val Ala Gly Ile	Tyr Leu Met Trp Arg His				
	305		310		315
Glu Arg Ile Lys Lys Thr Ser Phe Ser	Thr Thr Thr Leu Leu Pro				
	320		325		330
Pro Ile Lys Val Leu Val Val Tyr Pro	Ser Glu Ile Cys Phe His				
	335		340		345
His Thr Ile Cys Tyr Phe Thr Glu Phe	Leu Gln Asn His Cys Arg				
	350		355		360
Ser Glu Val Ile Leu Glu Lys Trp Gln	Lys Lys Lys Ile Ala Glu				
	365		370		375
Met Gly Pro Val Gln Trp Leu Ala Thr	Gln Lys Lys Ala Ala Asp				
	380		385		390
Lys Val Val Phe Leu Leu Ser Asn Asp	Val Asn Ser Val Cys Asp				
	395		400		405
Gly Thr Cys Gly Lys Ser Glu Gly Ser	Pro Ser Glu Asn Ser Gln				
	410		415		420
Asp Leu Phe Pro Leu Ala Phe Asn Leu	Phe Cys Ser Asp Leu Arg				
	425		430		435
Ser Gln Ile His Leu His Lys Tyr Val	Val Val Tyr Phe Arg Glu				
	440		445		450
Ile Asp Thr Lys Asp Asp Tyr Asn Ala	Leu Ser Val Cys Pro Lys				
	455		460		465
Tyr His Leu Met Lys Asp Ala Thr Ala	Phe Cys Ala Glu Leu Leu				
	470		475		480
His Val Lys Gln Gln Val Ser Ala Gly	Lys Arg Ser Gln Ala Cys				

485

490

495

His Asp Gly Cys Cys Ser Leu
500

<210> 159

<211> 535

<212> DNA

<213> Homo Sapien

<400> 159

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agttgcccg cgtgtccagg aggtagtatg aagcttgaca ttggcatcat 200

caatgaaaac cagcgcgttt ccatgtcacg taacatcgag agccgctcca 250

cctccccctg gaattacact gtcacttggg accccaaccg gtaccctctg 300

gaagttgtac aggccagtg taggaacttg ggctgcatca atgctcaagg 350

aaaggaagac atctccatga attccgttcc catccagcaa gagaccctgg 400

tcgtccggag gaagcaccaa ggctgctctg tttctttcca gttggagaag 450

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gcagtaagag gtgcatatcc actcagctga agaag 535

<210> 160

<211> 163

<212> PRT

<213> Homo Sapien

<400> 160

Met	Thr	Val	Lys	Thr	Leu	His	Gly	Pro	Ala	Met	Val	Lys	Tyr	Leu
1				5				10						15

Leu	Leu	Ser	Ile	Leu	Gly	Leu	Ala	Phe	Leu	Ser	Glu	Ala	Ala	Ala
				20				25						30

Arg	Lys	Ile	Pro	Lys	Val	Gly	His	Thr	Phe	Phe	Gln	Lys	Pro	Glu
				35				40						45

Ser	Cys	Pro	Pro	Val	Pro	Gly	Gly	Ser	Met	Lys	Leu	Asp	Ile	Gly
				50				55						60

Ile	Ile	Asn	Glu	Asn	Gln	Arg	Val	Ser	Met	Ser	Arg	Asn	Ile	Glu
				65				70						75

Ser	Arg	Ser	Thr	Ser	Pro	Trp	Asn	Tyr	Thr	Val	Thr	Trp	Asp	Pro
				80				85						90

Asn	Arg	Tyr	Pro	Ser	Glu	Val	Val	Gln	Ala	Gln	Cys	Arg	Asn	Leu
				95					100					105
Gly	Cys	Ile	Asn	Ala	Gln	Gly	Lys	Glu	Asp	Ile	Ser	Met	Asn	Ser
			110						115					120
Val	Pro	Ile	Gln	Gln	Glu	Thr	Leu	Val	Val	Arg	Arg	Lys	His	Gln
			125						130					135
Gly	Cys	Ser	Val	Ser	Phe	Gln	Leu	Glu	Lys	Val	Leu	Val	Thr	Val
			140						145					150
Gly	Cys	Thr	Cys	Val	Thr	Pro	Val	Ile	His	His	Val	Gln		
			155						160					

<210> 161
 <211> 2380
 <212> DNA
 <213> Homo Sapien

<400> 161
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 ccgccccctc tggaggctga agagggatcc cagccccctgc caccacaga 150
 cacgggctga ctgggggtgc tgccccctt gggggggggc agcacagggc 200
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 ccaagtcgtg ctctccttcc aggcctaccc tactgcccgc tgcgtcctgc 650
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cagggccggg cggccggcag ctacgtgggg gcctgcttcg acaggctgct 2100
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tgccctccca actgccagac ttctggggg ccctgcagca gcctcgcgcc 2200
ccgcgttccg ggcggctcca agagagagcg gagcaagtgt cccgggccct 2250
tcagccagcc ctggatagct acttccatcc cccggggact cccgcgccgg 2300
gacgcgggggt gggaccaggg gcgggacctg gggcggggga cgggacttaa 2350

ataaaggcag acgctgtttt tctaaaaaaa 2380

<210> 162

<211> 705

<212> PRT

<213> Homo Sapien

<400> 162

Met	Pro	Val	Pro	Trp	Phe	Leu	Leu	Ser	Leu	Ala	Leu	Gly	Arg	Ser
1				5					10					15

Pro	Val	Val	Leu	Ser	Leu	Glu	Arg	Leu	Val	Gly	Pro	Gln	Asp	Ala
				20					25					30

Thr	His	Cys	Ser	Pro	Gly	Leu	Ser	Cys	Arg	Leu	Trp	Asp	Ser	Asp
				35					40					45

Ile	Leu	Cys	Leu	Pro	Gly	Asp	Ile	Val	Pro	Ala	Pro	Gly	Pro	Val
				50					55					60

Leu	Ala	Pro	Thr	His	Leu	Gln	Thr	Glu	Leu	Val	Leu	Arg	Cys	Gln
				65					70					75

Lys	Glu	Thr	Asp	Cys	Asp	Leu	Cys	Leu	Arg	Val	Ala	Val	His	Leu
				80					85					90

Ala	Val	His	Gly	His	Trp	Glu	Glu	Pro	Glu	Asp	Glu	Glu	Lys	Phe
				95					100					105

Gly	Gly	Ala	Ala	Asp	Ser	Gly	Val	Glu	Glu	Pro	Arg	Asn	Ala	Ser
				110					115					120

Leu	Gln	Ala	Gln	Val	Val	Leu	Ser	Phe	Gln	Ala	Tyr	Pro	Thr	Ala
				125					130					135

Arg	Cys	Val	Leu	Leu	Glu	Val	Gln	Val	Pro	Ala	Ala	Leu	Val	Gln
				140					145					150

Phe	Gly	Gln	Ser	Val	Gly	Ser	Val	Val	Tyr	Asp	Cys	Phe	Glu	Ala
				155					160					165

Ala	Leu	Gly	Ser	Glu	Val	Arg	Ile	Trp	Ser	Tyr	Thr	Gln	Pro	Arg
				170					175					180

Tyr	Glu	Lys	Glu	Leu	Asn	His	Thr	Gln	Gln	Leu	Pro	Ala	Leu	Pro
				185					190					195

Trp	Leu	Asn	Val	Ser	Ala	Asp	Gly	Asp	Asn	Val	His	Leu	Val	Leu
				200					205					210

Asn	Val	Ser	Glu	Glu	Gln	His	Phe	Gly	Leu	Ser	Leu	Tyr	Trp	Asn
				215					220					225

Gln	Val	Gln	Gly	Pro	Pro	Lys	Pro	Arg	Trp	His	Lys	Asn	Leu	Thr
				230					235					240

Gly Pro Gln Ile Ile Thr Leu Asn His Thr Asp Leu Val Pro Cys

	245		250		255
Leu Cys Ile Gln Val Trp Pro Leu Glu	Pro Asp Ser Val Arg Thr				
260	265			270	
Asn Ile Cys Pro Phe Arg Glu Asp Pro	Arg Ala His Gln Asn Leu				
275	280			285	
Trp Gln Ala Ala Arg Leu Arg Leu Leu	Thr Leu Gln Ser Trp Leu				
290	295			300	
Leu Asp Ala Pro Cys Ser Leu Pro Ala	Glu Ala Ala Leu Cys Trp				
305	310			315	
Arg Ala Pro Gly Gly Asp Pro Cys Gln	Pro Leu Val Pro Pro Leu				
320	325			330	
Ser Trp Glu Asn Val Thr Val Asp Lys	Val Leu Glu Phe Pro Leu				
335	340			345	
Leu Lys Gly His Pro Asn Leu Cys Val	Gln Val Asn Ser Ser Glu				
350	355			360	
Lys Leu Gln Leu Gln Glu Cys Leu Trp	Ala Asp Ser Leu Gly Pro				
365	370			375	
Leu Lys Asp Asp Val Leu Leu Leu Glu	Thr Arg Gly Pro Gln Asp				
380	385			390	
Asn Arg Ser Leu Cys Ala Leu Glu Pro	Ser Gly Cys Thr Ser Leu				
395	400			405	
Pro Ser Lys Ala Ser Thr Arg Ala Ala	Arg Leu Gly Glu Tyr Leu				
410	415			420	
Leu Gln Asp Leu Gln Ser Gly Gln Cys	Leu Gln Leu Trp Asp Asp				
425	430			435	
Asp Leu Gly Ala Leu Trp Ala Cys Pro	Met Asp Lys Tyr Ile His				
440	445			450	
Lys Arg Trp Ala Leu Val Trp Leu Ala	Cys Leu Leu Phe Ala Ala				
455	460			465	
Ala Leu Ser Leu Ile Leu Leu Leu Lys	Lys Asp His Ala Lys Gly				
470	475			480	
Trp Leu Arg Leu Leu Lys Gln Asp Val	Arg Ser Gly Ala Ala Ala				
485	490			495	
Arg Gly Arg Ala Ala Leu Leu Leu Tyr	Ser Ala Asp Asp Ser Gly				
500	505			510	
Phe Glu Arg Leu Val Gly Ala Leu Ala	Ser Ala Leu Cys Gln Leu				
515	520			525	
Pro Leu Arg Val Ala Val Asp Leu Trp	Ser Arg Arg Glu Leu Ser				

	530	535	540
Ala Gln Gly Pro Val Ala Trp Phe His	Ala Gln Arg Arg Gln Thr		
545	550	555	
Leu Gln Glu Gly Gly Val Val Val Leu	Leu Phe Ser Pro Gly Ala		
560	565	570	
Val Ala Leu Cys Ser Glu Trp Leu Gln	Asp Gly Val Ser Gly Pro		
575	580	585	
Gly Ala His Gly Pro His Asp Ala Phe	Arg Ala Ser Leu Ser Cys		
590	595	600	
Val Leu Pro Asp Phe Leu Gln Gly Arg	Ala Pro Gly Ser Tyr Val		
605	610	615	
Gly Ala Cys Phe Asp Arg Leu Leu His	Pro Asp Ala Val Pro Ala		
620	625	630	
Leu Phe Arg Thr Val Pro Val Phe Thr	Leu Pro Ser Gln Leu Pro		
635	640	645	
Asp Phe Leu Gly Ala Leu Gln Gln Pro	Arg Ala Pro Arg Ser Gly		
650	655	660	
Arg Leu Gln Glu Arg Ala Glu Gln Val	Ser Arg Ala Leu Gln Pro		
665	670	675	
Ala Leu Asp Ser Tyr Phe His Pro Pro	Gly Thr Pro Ala Pro Gly		
680	685	690	
Arg Gly Val Gly Pro Gly Ala Gly Pro	Gly Ala Gly Asp Gly Thr		
695	700	705	

<210> 163
 <211> 2478
 <212> DNA
 <213> Homo Sapien

<400> 163
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 ggcgatggcc accggctaac cctggaagac atcttccatg acctgttcta 200
 ccacttagag ctccaggtca accgcaccta ccaaatgcac cttggaggga 250
 agcagagaga atatgagttc ttcggcctga cccctgacac agagttcctt 300
 ggcaccatca tgatttgcgt tccacctgg gccaaaggaga gtgcccccta 350
 catgtgccga gtgaagacac tgccagaccg gacatggacc tactccttct 400

ccggagcctt cctgtttctcc atgggcttcc tcgtcgcagt actctgctac 450
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 cgtccagcga gtccctgactt tccagccgct gcgcttcata caggagcacg 550
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 ccccatcctt ggccagtttc acaatctagc tcgacagagc atgaggcccc 1850

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 aataacacac tgtactgatg tcacaacttt gcaagctctg ccttggggtc 2250
 agcccatctg ggctcaaatt ccagcctcac cactcacaag ctgtgtgact 2300
 tcaaacaat gaaatcagt cccagaacct cggtttctc atctgtaatg 2350
 tggggatcat aacacctacc tcatggagtt gtggtgaaga tgaaatgaag 2400
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 aaacggtagc tatttaaaaa aaaaaaaaa 2478

<210> 164
 <211> 574
 <212> PRT
 <213> Homo Sapien

<400> 164
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 Gln Ser Ser Asn Phe Glu Asn Ile Leu Thr Trp Asp Ser Gly Pro
 35 40 45
 Glu Gly Thr Pro Asp Thr Val Tyr Ser Ile Glu Tyr Lys Thr Tyr
 50 55 60
 Gly Glu Arg Asp Trp Val Ala Lys Lys Gly Cys Gln Arg Ile Thr
 65 70 75
 Arg Lys Ser Cys Asn Leu Thr Val Glu Thr Gly Asn Leu Thr Glu
 80 85 90
 Leu Tyr Tyr Ala Arg Val Thr Ala Val Ser Ala Gly Gly Arg Ser
 95 100 105
 Ala Thr Lys Met Thr Asp Arg Phe Ser Ser Leu Gln His Thr Thr
 110 115 120
 Leu Lys Pro Pro Asp Val Thr Cys Ile Ser Lys Val Arg Ser Ile

				125					130					135
Gln	Met	Ile	Val	His	Pro	Thr	Pro	Thr	Pro	Ile	Arg	Ala	Gly	Asp
				140					145					150
Gly	His	Arg	Leu	Thr	Leu	Glu	Asp	Ile	Phe	His	Asp	Leu	Phe	Tyr
				155					160					165
His	Leu	Glu	Leu	Gln	Val	Asn	Arg	Thr	Tyr	Gln	Met	His	Leu	Gly
				170					175					180
Gly	Lys	Gln	Arg	Glu	Tyr	Glu	Phe	Phe	Gly	Leu	Thr	Pro	Asp	Thr
				185					190					195
Glu	Phe	Leu	Gly	Thr	Ile	Met	Ile	Cys	Val	Pro	Thr	Trp	Ala	Lys
				200					205					210
Glu	Ser	Ala	Pro	Tyr	Met	Cys	Arg	Val	Lys	Thr	Leu	Pro	Asp	Arg
				215					220					225
Thr	Trp	Thr	Tyr	Ser	Phe	Ser	Gly	Ala	Phe	Leu	Phe	Ser	Met	Gly
				230					235					240
Phe	Leu	Val	Ala	Val	Leu	Cys	Tyr	Leu	Ser	Tyr	Arg	Tyr	Val	Thr
				245					250					255
Lys	Pro	Pro	Ala	Pro	Pro	Asn	Ser	Leu	Asn	Val	Gln	Arg	Val	Leu
				260					265					270
Thr	Phe	Gln	Pro	Leu	Arg	Phe	Ile	Gln	Glu	His	Val	Leu	Ile	Pro
				275					280					285
Val	Phe	Asp	Leu	Ser	Gly	Pro	Ser	Ser	Leu	Ala	Gln	Pro	Val	Gln
				290					295					300
Tyr	Ser	Gln	Ile	Arg	Val	Ser	Gly	Pro	Arg	Glu	Pro	Ala	Gly	Ala
				305					310					315
Pro	Gln	Arg	His	Ser	Leu	Ser	Glu	Ile	Thr	Tyr	Leu	Gly	Gln	Pro
				320					325					330
Asp	Ile	Ser	Ile	Leu	Gln	Pro	Ser	Asn	Val	Pro	Pro	Pro	Gln	Ile
				335					340					345
Leu	Ser	Pro	Leu	Ser	Tyr	Ala	Pro	Asn	Ala	Ala	Pro	Glu	Val	Gly
				350					355					360
Pro	Pro	Ser	Tyr	Ala	Pro	Gln	Val	Thr	Pro	Glu	Ala	Gln	Phe	Pro
				365					370					375
Phe	Tyr	Ala	Pro	Gln	Ala	Ile	Ser	Lys	Val	Gln	Pro	Ser	Ser	Tyr
				380					385					390
Ala	Pro	Gln	Ala	Thr	Pro	Asp	Ser	Trp	Pro	Pro	Ser	Tyr	Gly	Val
				395					400					405
Cys	Met	Glu	Gly	Ser	Gly	Lys	Asp	Ser	Pro	Thr	Gly	Thr	Leu	Ser

410					415					420				
Ser	Pro	Lys	His	Leu	Arg	Pro	Lys	Gly	Gln	Leu	Gln	Lys	Glu	Pro
				425					430					435
Pro	Ala	Gly	Ser	Cys	Met	Leu	Gly	Gly	Leu	Ser	Leu	Gln	Glu	Val
				440					445					450
Thr	Ser	Leu	Ala	Met	Glu	Glu	Ser	Gln	Glu	Ala	Lys	Ser	Leu	His
				455					460					465
Gln	Pro	Leu	Gly	Ile	Cys	Thr	Asp	Arg	Thr	Ser	Asp	Pro	Asn	Val
				470					475					480
Leu	His	Ser	Gly	Glu	Glu	Gly	Thr	Pro	Gln	Tyr	Leu	Lys	Gly	Gln
				485					490					495
Leu	Pro	Leu	Leu	Ser	Ser	Val	Gln	Ile	Glu	Gly	His	Pro	Met	Ser
				500					505					510
Leu	Pro	Leu	Gln	Pro	Pro	Ser	Gly	Pro	Cys	Ser	Pro	Ser	Asp	Gln
				515					520					525
Gly	Pro	Ser	Pro	Trp	Gly	Leu	Leu	Glu	Ser	Leu	Val	Cys	Pro	Lys
				530					535					540
Asp	Glu	Ala	Lys	Ser	Pro	Ala	Pro	Glu	Thr	Ser	Asp	Leu	Glu	Gln
				545					550					555
Pro	Thr	Glu	Leu	Asp	Ser	Leu	Phe	Arg	Gly	Leu	Ala	Leu	Thr	Val
				560					565					570

Gln Trp Glu Ser

<210> 165
 <211> 1060
 <212> DNA
 <213> Homo Sapien

<400> 165
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 gtggccacaa catggctgcg gcgcgggggc tgctcttctg gctgttcgtg 100
 ctggggggcgc tctggtgggt cccggggccag tcggatctca gccacggacg 150
 gcgtttctcg gacctcaaag tgtgcgggga cgaagagtgc agcatgttaa 200
 tgtaccgtgg gaaagctctt gaagacttca cgggccctga ttgtcgtttt 250
 gtgaatttta aaaaagggtga cgatgtatat gtctactaca aactggcagg 300
 gggatccctt gaactttggg ctggaagtgt tgaacacagt tttggatatt 350
 ttccaaaaga tttgatcaag gtacttcata aatacacgga agaagagcta 400

catattccag cagatgagac agactttgtc tgctttgaag gaggaagaga 450
tgattttaat agttataatg tagaagagct tttaggatct ttggaactgg 500
aggactctgt acctgaagag tcgaagaaag ctgaagaagt ttctcagcac 550
agagagaaat ctctgagga gtctcggggg cgtgaacttg accctgtgcc 600
tgagcccgag gcattcagag ctgattcaga ggatggagaa ggtgctttct 650
cagagagcac cgaggggctg cagggacagc cctcagctca ggagagccac 700
cctcacacca gcggtcctgc ggctaacgct cagggagtgct agtcttcggt 750
ggacactttt gaagaaattc tgcacgataa attgaaagtg ccgggaagcg 800
aaagcagaac tggcaatagt tctcctgcct cgggtggagcg ggagaagaca 850
gatgcttaca aagtcctgaa aacagaaatg agtcagagag gaagtggaca 900
gtgcggttatt cattacagca aaggatttcg ttggcatcaa aatctaagtt 950
tgttttacaa agattgtttt tagtactaag ctgccttggc agtttgcatt 1000
tttgagccaa acaaaaatat attattttcc cttctaagta aaaaaaaaaa 1050
aaaaaaaaaa 1060

<210> 166

<211> 303

<212> PRT

<213> Homo Sapien

<400> 166

Met	Ala	Ala	Ala	Pro	Gly	Leu	Leu	Phe	Trp	Leu	Phe	Val	Leu	Gly
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Ala	Leu	Trp	Trp	Val	Pro	Gly	Gln	Ser	Asp	Leu	Ser	His	Gly	Arg
				20					25					30
Arg	Phe	Ser	Asp	Leu	Lys	Val	Cys	Gly	Asp	Glu	Glu	Cys	Ser	Met
				35					40					45
Leu	Met	Tyr	Arg	Gly	Lys	Ala	Leu	Glu	Asp	Phe	Thr	Gly	Pro	Asp
				50					55					60
Cys	Arg	Phe	Val	Asn	Phe	Lys	Lys	Gly	Asp	Asp	Val	Tyr	Val	Tyr
				65					70					75
Tyr	Lys	Leu	Ala	Gly	Gly	Ser	Leu	Glu	Leu	Trp	Ala	Gly	Ser	Val
				80					85					90
Glu	His	Ser	Phe	Gly	Tyr	Phe	Pro	Lys	Asp	Leu	Ile	Lys	Val	Leu
				95					100					105
His	Lys	Tyr	Thr	Glu	Glu	Glu	Leu	His	Ile	Pro	Ala	Asp	Glu	Thr
				110					115					120

Asp	Phe	Val	Cys	Phe	Glu	Gly	Gly	Arg	Asp	Asp	Phe	Asn	Ser	Tyr	125	130	135
Asn	Val	Glu	Glu	Leu	Leu	Gly	Ser	Leu	Glu	Leu	Glu	Asp	Ser	Val	140	145	150
Pro	Glu	Glu	Ser	Lys	Lys	Ala	Glu	Glu	Val	Ser	Gln	His	Arg	Glu	155	160	165
Lys	Ser	Pro	Glu	Glu	Ser	Arg	Gly	Arg	Glu	Leu	Asp	Pro	Val	Pro	170	175	180
Glu	Pro	Glu	Ala	Phe	Arg	Ala	Asp	Ser	Glu	Asp	Gly	Glu	Gly	Ala	185	190	195
Phe	Ser	Glu	Ser	Thr	Glu	Gly	Leu	Gln	Gly	Gln	Pro	Ser	Ala	Gln	200	205	210
Glu	Ser	His	Pro	His	Thr	Ser	Gly	Pro	Ala	Ala	Asn	Ala	Gln	Gly	215	220	225
Val	Gln	Ser	Ser	Leu	Asp	Thr	Phe	Glu	Glu	Ile	Leu	His	Asp	Lys	230	235	240
Leu	Lys	Val	Pro	Gly	Ser	Glu	Ser	Arg	Thr	Gly	Asn	Ser	Ser	Pro	245	250	255
Ala	Ser	Val	Glu	Arg	Glu	Lys	Thr	Asp	Ala	Tyr	Lys	Val	Leu	Lys	260	265	270
Thr	Glu	Met	Ser	Gln	Arg	Gly	Ser	Gly	Gln	Cys	Val	Ile	His	Tyr	275	280	285
Ser	Lys	Gly	Phe	Arg	Trp	His	Gln	Asn	Leu	Ser	Leu	Phe	Tyr	Lys	290	295	300

Asp Cys Phe

<210> 167

<211> 2570

<212> DNA

<213> Homo Sapien

<400> 167

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tcgaagtctt gaactccagc cccgcacatc cacgcgcggc acaggcgcgg 200

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gggctcgggc ggcgggagta gggcccggca gggaggcagg gaggctgcat 300

attcagagtc gcgggctgcg ccctgggcag aggccgcctt cgctccacgc 350
 aacacctgct gctgccaccg cgccgcgatg agccgcgtgg tctcgctgct 400
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 catgcttatt ttgctaaagg atgcacccaa acttcaaact tcaagcaaat 1450
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 aaaaaaaaaa aaaaaaaaaa 2570

<210> 168
 <211> 273
 <212> PRT
 <213> Homo Sapien

<400> 168
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 20 25 30
 Cys Phe Ala Asp Phe Lys His Pro Cys Tyr Lys Met Ala Tyr Phe
 35 40 45
 His Glu Leu Ser Ser Arg Val Ser Phe Gln Glu Ala Arg Leu Ala
 50 55 60
 Cys Glu Ser Glu Gly Gly Val Leu Leu Ser Leu Glu Asn Glu Ala
 65 70 75
 Glu Gln Lys Leu Ile Glu Ser Met Leu Gln Asn Leu Thr Lys Pro
 80 85 90

Gly Thr Gly Ile Ser Asp Gly Asp Phe Trp Ile Gly Leu Trp Arg		
	95	100 105
Asn Gly Asp Gly Gln Thr Ser Gly Ala Cys Pro Asp Leu Tyr Gln		
	110	115 120
Trp Ser Asp Gly Ser Asn Ser Gln Tyr Arg Asn Trp Tyr Thr Asp		
	125	130 135
Glu Pro Ser Cys Gly Ser Glu Lys Cys Val Val Met Tyr His Gln		
	140	145 150
Pro Thr Ala Asn Pro Gly Leu Gly Gly Pro Tyr Leu Tyr Gln Trp		
	155	160 165
Asn Asp Asp Arg Cys Asn Met Lys His Asn Tyr Ile Cys Lys Tyr		
	170	175 180
Glu Pro Glu Ile Asn Pro Thr Ala Pro Val Glu Lys Pro Tyr Leu		
	185	190 195
Thr Asn Gln Pro Gly Asp Thr His Gln Asn Val Val Val Thr Glu		
	200	205 210
Ala Gly Ile Ile Pro Asn Leu Ile Tyr Val Val Ile Pro Thr Ile		
	215	220 225
Pro Leu Leu Leu Leu Ile Leu Val Ala Phe Gly Thr Cys Cys Phe		
	230	235 240
Gln Met Leu His Lys Ser Lys Gly Arg Thr Lys Thr Ser Pro Asn		
	245	250 255
Gln Ser Thr Leu Trp Ile Ser Lys Ser Thr Arg Lys Glu Ser Gly		
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Met Glu Val

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